AMERICAN DRUGGIST

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American Druggist and Pharmaceutical Record.
A JOURNAL OF PRACTICAL PHARMACY.

stamped in gold on the cover, will be forwarded on receipt of fifty cents by the

AMERICAN DRUGGIST
PUBLISHING CO.

A Condensed Dispensatory of New and Rare Remedies.

THE doses given are for adults unless otherwise specified. The prices are the net prices paid by the retail druggist in purchasing small quantities in the New York market, and are inclusive of containers.

Abrastol. See Asaprol.

Abrin. Brownish yellow powder, soluble in water. Fatal dose $\frac{1}{10}$ gr. For producing artificial conjunctivitis in ophthalmology like the abrus precatorius whence it is derived.....5 gr. vials, ea. 2 00

Absinthin. Brilliant, prismatic colorless, bitter crystals, soluble in A. C. E., slightly soluble in water. Digestive stimulant. Dose 1½ to 2 grs. at meals...15 gr. vial, ea. .75

Acetal. (DIETHYL-ACETAL, ETHYLIDENE DIETHYL ETHER)—Limpid liquid; sp. gr. at 22° C. (71.6 F.), 0.821; Soluble in 18 parts of water. Hypnotic, narcotic. Dose: 1¼-2½ fl. drs..... oz. 100

Acetanilid. (PHENYLACETAMIDE, ANTIFEBRIN), Fine white crystals. Max. single doses 15 grs., daily 60 grs. Antipyretic, Analgesic. Antifebrin, oz. .15; acetanilid, lb.....40

Acetoorthotoluid, colorless soluble crystals, antipyretic.

Acetophenone (PHENYLEMETHYLKETONE, HYPNONE.) Highly refractive, volatile, colorless liquid, with an odor resembling bitter almonds; disagreeable burning taste. Hypnotic, anodyne. Dose 2 to 8 minims. For price, package etc., see Hypnone.

Acetono-Resorcin. Combination of two molecules of Resorcin with one of acetone. Small anhydrous prisms, soluble in alkalis, insoluble in W. A., E., C. uses same as resorcin. .....

Acetphenetidine. See Phenacetine.

Acetylphenylhydrazin. See Hydracetine.

Acid agaric. See agaricin.

anisic. Colorless prisms, soluble in A., insoluble in water. Antiseptic, antipyretic (wounds or acute rheumatism). Dose, sodium salt 15 grains.
ACID, ... 15 gr. vial, ea. .25

camphoric. Colorless, transparent bitter crystals or plates. Soluble in A., E., oils, hot water slightly in cold water. Anticatarrhal, antiseptic. (Nasal ulcers, etc.) In douche, spray or paint, ½ to 2 per cent solution. Antisudorific (night sweats). Dose 12 grains every 4 hours, or 30 grains at night. oz. .55

cathartinic. Brown hygroscopic scales. Soluble water or dilute A. Laxative, cathartic. Dose 4 to 6 grs. oz. .75

cinnamic. (CINNAMYLIC.) White odorless crystals. Soluble in A., E., hot water. Insoluble in cold water. Antitubercular. Intravenous dose, 1 to 5 grs. in 5 per cent. oily emulsion, with 0.7 per cent. solution of Na. Cl. Locally in lupus, etc., in 5 per cent. emulsion or solution with cocaine....oz. 1.00

cresotic. Three homologous acids occur in volatile, prismatic needles. Sodium salts only are used See sodium salts.

dithiosalicylic. Powerful antiseptic. The salts only of the two isomeric acids are used. See sodium salts.

eugenic. See Eugenol.

glycerin-phosphoric. Glycerin ester of phosphoric acid. One of the principal components of leicthin, the most valuable phosphoric food constituents. Faintly yellow, odorless, oily liquid, soluble in water, A. For therapeutic uses, dose and price, see Calcium glycerophosphate.

gymnemic. Brown crystalline powder. Soluble in A., less so in water. Insoluble C. E., Emetic. Dose 4 to 6 grs. To disguise bitter taste rinse the mouth with a 5 per cent. solution.

Acid, gynocardic. Yellowish unctuous solid, of peculiar strong odor and burning, acrid taste. Used externally and internally like chaulmoogra oil in leprosy, syphillis, gout, rheumatism, etc. Dose, ½ to 3 grs. As a liniment in 10 to 50 per cent. oily solution.

osmic. (PER-OSMIC, OSMIC ANHYDRIDE.) Lustrous orange, hygroscopic needles of suffocating and penetrating odor. Antiseptic discutient (when applied pure) antineuralgic (epilepsy, sciatica). Hypodermic injection, 7 to 15 minims of 1 per cent. solution several times daily. Dose, 1-50 gr. in pill three or four times daily.
15 gr. vial, ea. .95

phenylacetic. (ALPHA-TOLUIC.) Lustrous crystals. Soluble in A. E., hot water. Less soluble in cold water. Antiseptic, antitubercular. (Phthisis, typhoid fever, etc.) Dose, 1 to 3 grs. three times daily in water.....oz. 1.50

salicyl-sulphuric. (SULPHOSALICYLIC, SALICYLSULPHONIC.) White crystals. Soluble W., A. Test for proteids, urine albumin, etc.....1 oz. .75

sclerotic. (SCLEROTINIC.) Dragendorff's. Faintly acid, hygroscopic powder, odorless, tasteless. Soluble in water. Difficultly in A. Substitute for ergot in epilepsy, inferior to E. in gynæcology. Dose, ½ to 5 grs. per day.....⅛ oz. 4.50

sulpho-salicylic. See salicylsulphuric.

trichloracetic. (CHLORACETIC.) Deliquescent, colorless crystals of faint odor, very caustic. Soluble in water, A., E. Powerful escharotic, pure. (Warts, nævi, corns, etc.) Astringent in nasal and laryngeal affections in 10 per cent. solutions. Test for urine albumin .....oz. .40

Adonidin. Glucoside from Adonis vernalis. Yellow, very bitter, hygroscopic powder. Soluble in water, A., E. Cardiac tonic, regulating the heart beats in dyspnœa, palpitation, etc. Dose, ¼ to 1 gr. four times daily with ammonium carbonate and chloroform water.
5 gr. vial gr. .20
15 gr. vial gr. .15

Agaricin. (AGARIC, AGARACIC or AGARACINIC ACID.) From white agaric, white microscopic scales, colorless, odorless, insipid. Soluble in A., hot water, slightly in E. and cold water. Almost insoluble in C. Antisudorific (in night sweats), ¼ to ½ gr. in pill at night, or less hypodermically.
15 gr. vials, each .40

Agopyrin. A mixture of antipyrine salicylate, ammonium chloride and cinchonine sulphate. For coryza, bronchitis, influenza, etc.....

Aesculin. (POLYCHROME, BICOLORIN.) Lustrous white acicular crystals. Soluble in hot water, fluorescent. Substitute for quinine in remittent fever... .....15 gr. vial, ea. .50

Agathin. (METHYLPHENYLHYDRAZINE SALICYLATE.) Small colorless or greenish scales, inodorous, tasteless. Soluble in A., E., Benz. Insoluble in water. Antirheumatic, anti-neuralgic. Dose, 2 to 8 grs. 2 or 3 times daily.....oz 3.50

Albolene. A white, odorless, neutral petroleum jelly and oil.
SOLID..... .....1 lb. cans. ea. 40
LIQUID.....1 lb. bot. ea. 40
4 oz. bot.....ea. .15

Allyl tribromide. (TRI-BROMHYDRIN.) Colorless or slightly yellowish liquid. Soluble in E. Sedative, anodyne (hysteria, asthma, whooping cough, etc). Dose, 5 drops 3 or 4 times daily. Inj. 2 to 4 drops dissolved in E.....oz 2.00

Alphol. (SALICYL-ALPHA NAPHTHOLATE.) Resembling Salol, which see.

Aluminum aceto-tartrate. Faintly yellowish granules, with acid, astringent taste, soluble slowly in water. Astringent, disinfectant. (Nasal and laryngeal affections.) Apply in ½ to 2 per cent. solution, or as snuff, with 2 parts of boric acid...1 oz. .90

boroformicate. Large, well-defined lustrous crystals, sweetish astringent taste. Soluble slowly in water. Astringent, disinfectant, used like aceto-tartrate, but is milder.

Aluminum gallate, also aluminum and ammonium gallate. See gallal.

Alumnol. (ALUMINUM NAPHTHOL-SULPHONATE.) White or pinkish powder. Very soluble in water (blue fluorescence) and in glycerin, less so in A. Insoluble in E. Non-irritant, antiseptic. (Wounds, gonorrhea, etc.) ⅛ to 2 per cent. solutions. In Dermatology, 10, 20, or even 50 per cent. solutions...oz. .60

Amido-antipyrine. Resembles antipyrine, but more soluble.

Ammonium embelate. Harmless, taenifuge. Dose 6 grs. fasting, followed by castor oil.....

Amylene Hydrate. (DIMETHYLETHYLCARBINOL, TETIARY AMYL ALCOHOL.) limpid, colorless, hygroscopic, liquid, with penetrating ethereal odor resembling camphor and peppermint. Soluble in A., E., C., 8 parts water. Anodyne, hypnotic. Dose, 45 to 60 minims. Whooping cough in children, 3 to 4 min. oz. .45

Analgesine. Synonym for antipyrin.

Analgen. (ORTHO-ETHYOXY-ANA-MONOBENZOYL-AMIDO CHINOLINE.) Colorless crystals.

Anaspalin. Synonym for anhydrous wool fat.

Anemonin. From Anemone pulsatilla. Small, white, acicular, inodorous crystals. Soluble in A., E., sparingly in water. Anti-catarrhal, sedative (whooping cough, etc.) Emmenagogue. Toxic in large doses. Maximum daily dose 3 grs.
15 gr. vial, ea. 1.30

Annidalin. (DITHYMOL TRI-IODIDE, THYMOL IODIDE.) Reddish brown powder, decomposed by light. Soluble in E., slightly in A., insoluble in water. Antiseptic application similar to iodoform or aristol.

Anthrarobin. (DESOXYALIZARIN.) Phenol derivative, allied to chrysophanic acid. Yellowish white powder. insoluble in water and dil. acids. Soluble in glycerin, in 5 parts A., and in alkaline media. Substitute for chrysasrobin. Apply in 10 per cent. ointment or solution.
oz. vial, .50

Anticholerin. Cholera antitoxin solution, clear brown, viscid liquid. Injected in muscular tissue of stomach of cholera patients.....

Antidiphtherin. See diphtheria antitoxin.

Antikamnia. A white, micro-crystaline, odorless and tasteless powder; nearly insoluble in W., but readily soluble in A. and E. Antipyretic, analgesic and anodyne. Dose 3 to 10 grs., in powder or tablets, taken with a swallow of water or wine.
oz. 1.00

Antinervin. (SALICYLBROMANILID, SALBROMALIDE.) Mixture of ammonium bromide 1, salicylic acid 1, and acetanild 2. Sedative, antipyrectic, analgesic. Dose: 3 to 8 grs.
oz. .80

Antinonnin. (ORTHODINITRO-CRESOL.) Insecticide, fungicide, and wood preservative.....1 lb. cans, lb. 1.00

Antirheumatin. Compound of methylene, blue and sodium salicylate, Dark blue crystals soluble in W., A., Antirheumatic. Dose 1 to 1½ grs. in pills every 2 or 3 hours.

Antisepsin. (APEPSIN, MONO-OR PARA-BROMACETANILID). Colorless prismatic crystals. Insoluble in cold water. Slightly soluble in A., and in hot water. Antiseptic, antipyretic, sedative. Dose: 3 to 10 grains. Said to be dangerous. (Not to be confounded with a mixture of zinc sulphate, zinc iodide, thymol and boracic acid called antiseptine)..... oz 1.50

Antispasmin. (SODIUM SALICYLATE AND NARCEINE-SODIUM). White somewhat hygroscopic powder, soluble in water. Antispasmodic sedative, hypnotic. (Whooping cough, convulsions, cramps, etc.) Dose ⅛ to 1 gr. 3 times daily. 15 gr. vials, ea. .75

Antithermin. (PHENYLHYDRAZIN LEVULINIC ACID.) White powder. Insoluble in water. Antiseptic, antipyrectic, analgesic. Should be used with caution. Dose: 3 to 10 gr.
1 oz. 3.50

Antitoxin. Product of metabolism in blood serum under the influence of specific bacilli. See Diphtheria antitoxin, Tetanus antitoxin, Cholera antitoxin, etc.

Apiol. Green, liquid alcoholic extract of parsley seeds. Dose; emmenagogue, antiperiodic, etc., 2 to 9 min., 2 or 3 times daily. Antiperiodic 15 to 45 min. daily....1 oz. .55

crystals. Stearoptene of oil of parsley. White needles, faint parsley odor. Insoluble in water. Dose, emmenagogue, 5 grs. 2 or 3 times daily. Maximum daily dose 4 grs.
15 gr. vials, each .25

Arbutin. Glucoside from uva ursi. Long colorless, bitter needles, soluble in water. A. Insoluble in E. Diuretic. Dose 10 to 15 grs. 4 or 5 times daily.....1 oz. 1.75
15 gr. vials, each .25

Arecoline. Alkaloid from areca nut, alkaline liquid. Soluble in water, A. E., C. Powerful anthelmintic and heart poison (resembling muscarine). Veterinary practice. Dose $\frac{1}{18}$ to $\frac{1}{10}$ gr. 15 gr. vials, each.....

Argentamine. (ETHYLENE-DIAMINE SILVER PHOSPHATE SOLUTION). 8 per cent. solution of silver phosphate in ethylenediamine. Colorless alkaline liquid turning yellow on exposure. Antiseptic and astringent, but not coagulating proteids. Uses same as corrosive sublimate (1 to 4000 solution).....oz. .75

Aristol. (DITHYMOL-DIODIDE formerly incorrectly termed ANNIDALIN, which see). Bulky reddish, resinous powder, of a slightly aromatic odor. Insoluble in water, G., soluble in E., C., oils, slightly in A. Decomposed by heat and light. Antiseptic dressing. Substitute for iodoform. In ethereal, oily or fatty vehicles or fatty powder.
oz. 1.80

Asaprol. (ABRASTOL, CALCIUM BETA-NAPHTOL-ALPHA-MONO SULPHONATE.) Grayish white odorless powder. Decomposed at 122° F. Soluble in 1 water and 2 A. I., insoluble in E. ANTISEPTIC, ANTIPYRETIC ANTIRHEUMATIC (diphtheria, rheumatism, etc.) Applied externally in 5 per cent. solution. Dose,
3 to 12 gr. 4 or 5 times a day.....

Asboline. Prepared from pine-root. Yellowish oil consisting principally of pyroc atechol and its homologues. Antitubercular.....

Asepsin. (BROM-ACETANILID.) Colorless prisms insoluble in W. Anodyne, analgesic. Dose 1½ grs.

Aseptol. (SOZIOLIC, SULPHOBENZOIC or ORTHOPHENOL-SULPHONIC ACID.) Pure: small deliquescent scales forming a pinkish liquid. Very soluble in A., water. In commerce as 33⅓ per cent. solution. Uses same as carbolic acid, but less poisonous internally, and less irritating externally.....oz. 25

Asparagin. From asparagus officinalis. Beautiful, colorless, odorless crystals soluble in hot water, acids and alkalies, less so in cold. Insoluble in A., E. Diuretic. Dose ½ to 2 grs. daily... .....oz. 1.25

Aspidospermine. Commercial mixture of Quebracho alkaloids. Grayish yellow powder, slightly soluble in water. Yields soluble salts with acids. Tonic, febrifuge, respiratory stimulants (asthma, etc.) Dose, commercial article ¾ to 1½ grains daily. True alkaloid ¼ to ½. Commercially pure..15 gr. vial ea. 1.00

Atherosperma moschata. (AUSTRALIAN SASSAFRAS.) The bark is employed as a tea in Australia.

Baptisin. Glucoside from Baptisia tinctoria. Yellow resinous powder of strong odor. Purgative, in large doses emeto-cathartic. Dose 1⅛ to 4½ grs .....25 gr. vials, ea. .50

Beberine-alkaloid. (BERBERINE, BIBIRINE BUXINE). From Nectandra Rodiæi. Yellowish brown, bitter powder. Soluble A., E. Insoluble in cold water. Tonic. Febrifuge. (Periodic migraine, neuralgia, etc.) Dose 1 to 10 grs. Not to be confounded with Berberine.
Imported oz. 3.00
Domestic oz. 1.55

Benzacetin. (ACETAMIDO-METHYL-SALICYLIC ACID.) White crystals, soluble in A., slightly in water. Forms salts with basis. Prompt antineuralgic.

Benzanilid. (PHENYL-BENZ-AMIDE.) Pinkish white crystalline powder. Insoluble in water, soluble in 58 A. Mild antpyetic. Dose 1 to 10 grs. maximum daily dose 48 grs..oz. 1.85

Benzonaphthol. (BETA-NAPHTHOL BENZOATE.) Analogous to betol. White crystalline powder or long needles; slight aromatic in odor, soluble in E., C., hot A. Almost insoluble in cold A. Insoluble in water. Intertinal antiseptic. diuretic. Dose 50 to 75 grs. daily in small divided doses in powder or emulsion, ...oz. 50

Benzo-phenonoid- Non-irritant germicide similar to pyoctanin. Corneal ulcers, purulent keratitis, etc. Soluble in 100 water. .....

Benzosol. (BENZOYL-GUAIACOL, GUAIACOL BENZOATE). White aromatic powder, soluble in C., E., hot A. Almost insoluble in water. Antiseptic (Pulmonary tuberculosis). Dose, 4 grs. 3 times daily gradually increased up to 12.....oz. 1.15

Benzoyleugenol. Neutral acicular, colorless, ordorless, slightly bitter crystals. Insoluble in water, freely soluble in A., E. Anti-tubercular.

Betol. (BETA-NAPHTHOL SALICYLATE, NAPHTHALOL, NAPTHO-SALOL). White crystalline, insipid powder, almost odorless, soluble in E., C., less so in A. insoluble in water or glycerin. Intestinal antiseptic, catarrh, etc. Like salol. Dose 4 to 8 grs. 3 or 4 times daily . .....oz. 50

Bismuth, beta-naphtholate. Brown, odorless, neutral, insoluble powder containing 23 per cent. beta-naphthol. Intestinal antiseptic. like betol, salol, etc. Dose 15 to 30 grs.
1 oz. vials incl. 1.00

[salicylate, basic 64 per cent. (Generally termed bismuth salicylate.) Whitish, odorless, tasteless, crystalline powder. Soluble in acids and alkalis in the decomposition. Insoluble in water, A, E. Antiseptic, disinfectant. (Diarrhœa of phthisis, typhoid fever, enteritis, etc.) Dose 4 to 6 grs. (children ½ to 1 gr.) every 2 hours.....oz. 23

sub-gallate. (BASIC BISMUTH ALLATE) see Dermatol.

sub-Iodide. (OXY-IODIDE.) Brownish-red amorphous, inodorous, insoluble powder. Antiseptic. Applied pure, like iodoform (Gonorrhea 1 per cent. mixture). Dose internally 4 to 9 grs. daily. Gastric ulcers, typhoid fever, etc.)
oz. 32

tribromphenol. Yellow, odorless, tasteless insoluble powder. Internal antiseptic (Cholera, etc.). Dose 75 to 100 grs. daily.....oz. 1.10

Blancoline. A perfectly white, odorless and neutral petroleum jelly corresponding to the G. P. and U. S. P. petroleum base (solid) and oil (liquid).
Solid, in 1 lb. cans.....lb. .35
Liquid, in 1 lb. bottles.....lb. .35

Boldine. Alkaloid. From Boldoa chiliensis. White, turning dark on exposure. Soluble in A., E., C. and in caustic alkalis. Hepatic tonic and hypnotic (Biliary calculi, and disease of liver and bladder.) Dose, 3 grs. daily in capsules or in 5 per cent. enema. .....

Bromacetanilid. See Antisepsin.

Bromal. Analogue of chloral. Oily liquid, of peculiar penetrating odor and sharp burning taste. On exposure absorbs moisture and is converted into the crystalline hydrate. Not to be confounded with Bromol see below.....oz. 2.50

Bromamide. (MONO-BROM-PHENYL-ACETAMIDE). Crystals, soluble in C., E., oils, boiling A. Insoluble in water. Contains 75 per cent. Bromine. Antipyretic, analgesic, antirheumatic. Dose 10 to 15 grs.
oz. 2.00

Bromol. (TRIBROMPHENOL). White crystalline powder, or soft white crystals. Soluble in A., E., C., oils, less so in glycerin; almost insoluble in water. Disinfectant, surgical and intestinal. (Wounds, diarrhœa, typhoid fever, etc.) Externally in 2 to 3 per cent. oily solution, in talcum, or in 4 per cent. glycerin solution (diphtheria). Internally 1½ grs. 4 or 5 times daily. Not to be confounded with Bromal; which see above.....oz. 1.50

Butyl-chloral-hydrate. (CROTON-CHLORAL) Colorless crystals, resembling chloral in odor, very soluble in A. less so in dilute A. Anodyne anaesthec (neuralgia of the fifth pair, facial neuralgia of anemic persons), soporific dose 10 to .15 grs .....1 oz. .50

Caffeine. The following salts are mostly very soluble. They havebeen recommended for hypodermic injection, and all contain about 50 per cent. of the alkaloid, SODIO-BENZOATE (44.8 per cent.), oz. 0.50. SODIO CINNAMATE (62.5 per cent.) oz. 0.75. SODIO CITRATE, oz. 1.50. SODIO-SALICYLATE (69.5 per cent.) oz. 1.20. BOROCITRATE, oz. 3.50. PHENATE, PHENYLATE or CARBOLATE. oz. 3.50. PHTHALATES soluble in water.....oz. 3.00

chloral. See chloral caffeine.

iodol. A combination in molecular proportions which does not liberate iodine as rapidly as iodol. Substitute for iodol.....

Camphar. Supersaturated solution of camphor in diluted alcohol. Externally in dermatology .....

Camphoid. Combination of pyroxylon, camphor and alcohol, used like collodion.....

Cancroin. Alexin from cancerous, tissue, according to Adamkiewicz. Clear, albuminous fluid, specific for cancer. Hypodermic inj. 4 min. once a day, increasing by 4 min. each day until 16 min. is given, continue this dose as required. Inject into sound tissue adjacent to cancer.
300 gr. vials, ea. 7.50

Cannabine tannate. Yellow or brownish powder, bitter astringent, slightly soluble in W. A. E. readily if acidulated, Hypnotic, sedative, (hysteria, etc.) Dose 4 to 8 grs. 3 times a day, Max. daily dose 30 grs .....oz. 2.50
15 gr. vials, ea. .25

Cannabinon. From the tops of cannabis sativa. Bal mic, resinous body, insoluble in W. soluble in A., E., C., benzene, oils. Hypnotic. Dose ½ to 1½ grs. disguised in powdered coffee.....15 gr. vials, ea. .20. 10 per cent. trituration.....oz. .60

Cantharidin. From Canthiris vesicatoria. Colorless, odorless, tabular crystals, soluble in A., E., dil. alkalis, insoluble in water. Recommended by Liebreich for treatment of tuberculosis. Hypodermic inj. of 1 Cc. of 1 to 5000 alkaline solution
15 gr. vials, ea. 2.00

Cardine. Liquid extract from heart muscles of animals. Supposed to affect the heart as a tonic...oz. 1.00

Carvacrol iodide. Salt of phenol from oil of origanum. Yellowish brown powder, insoluble in W., soluble in E. C. oil substitute for and used in same manner as aristol (and iodoform). Not in the market.

Cathartic Acid. (CATHARTINIC) See Acid Cathartic.

Cerebrine. Liquid glycerin extract from brains of animals. Supposed to exert a specific action on the brain.....oz. 1.00

Champacol. Camphor of champaca wood.

Cholen. See Ethyl chloride.

Chinol. (CHINOLINE or QUINOLINE MONOHYPOCHLORIDE.) White, crystalline, odorless powder, almost insoluble in water. Soluble in A. Antipyretic. Dose, 3 to 5 grs.....

Chinoline. (QUINOLINE, LEUCOLINE.) Synthetic alkaloid. Colorless hygroscopic liquid, with pungent characteristic aromatic odor. Very slightly soluble in cold water. Soluble in A., E., C., hot water. Turns brown on exposure. Antiseptic. (locally in pharyngology, carious teeth, cotton saturated and pressed into hollow, renew every two hours). Antizymotic (0.2 per cent. preserves urine. 0.4 per cent. blood). Antipyretic. Dose, 15 to 30 min. daily.....1 oz. 1.50

Chino-toxin. (DICHINOLIN-DIMETHYL-SULPHATE, QUINOTOXIN.) Synthetic, analogous in action to curare. ....

Chloralamid. (CHLORAL-FORMAMID.) German Pharmacopœia. Lustrous, colorless, slightly bitter, crystals. Soluble in A., 3 glycerin, slowly in 20 water. Decomposed at 140° F. or by alkalis. Valuable hypnotic, producing calm, refreshing sleep within half an hour without bad after-effects. (Alcoholic insomnia, mental disorders, hysteria, neuralgia, pulmonisis.) Dose, 15 to 40 grs., dissolved in elixir, not to be confounded with chloralimid. 25 grm. .80

Chloral-ammonium. White crystalline unstable powder. Soluble in water. Hypnotic. Dose, 15 to 30 grs.
oz. 1.50

butyl hydrate. See butyl.

cyanhydrin. See Chloral Hydrocyanate.

caffeine. (CAFFEINE-CHLORAL.) Molecular combination of chloral and caffeine. White scales. Soluble in 6 water, 30 A., insoluble in E. Decomposed by acids and alkalis. Anaalgesic, antirheumatic, laxative. Hyp. inj., 2 to 7 grs.....oz. 1.50

carbol. (CHLORAL-PHENOL.) Oily liquid mixture of equal parts of chloral and carbolic acid. Counterirritant, epispastic and local anæsthetic. For toothache.

camphor. (CAMPHORATED CHLORAL, N. F.) Combination of equal parts of chloral and camphor, oily liquid. Soluble in A., E., C. oils, glycerin; decomposed by water.

hydrocyanate. (CHLORAL HYDROCYANIN, CHLORAL CYANHYDRIN.) White rhombic plates with odor of hydrocyanic acid and chloral. Soluble in water, A., E. Fairly stable in solution. Decomposed by alhalis. 1.29 parts dissolved in 9 parts distilled water equivalent to U. S. P. 2 per cent. hydrocyanic acid. 1 to 160 = bitter almond water of Germ. Pharm. 646 parts hydrocyanate contain 1 part pure HCN. Doz. 1.20

menthol. Mixture of equal parts of chloral and menthol. Local disinfectant, anæsthetic.

urethane. See Uralium.

Chloralose. (ANHYDRO-GLUCO-CHLORAL.) Fine, bitter, colorless needles, soluble in A., E., warm water, slightly in cold water. Anesthetic, hypnotic. Dose 3 to 12 grs .1..oz. 3.25

Chlorophenol. (ORTHO MONO-CHLOR-PHENOL) Formed by the action of chlorine on phenol. Antiseptic, volatile liquid, inhalant in diseases of the respiratory organs (chorphenol 14, alcohol 4, eugenol 1, menthol). Inhale 16 to 30 drops daily. The vapors (heavier than air) penetrate to all parts of the lungs. Also applied to wounds, ulcers, etc.....

Chloryl. A mixture of ethyl and methyl chlorides used for local anæsthesia in minor surgery, dentistry, etc.

Cocaine-phenate. (PHENYLATE, CARBOLATE.) Viscid yellowish mass, soluble in 50 per cent. A., insoluble in water. Local anæsthetic. (Catarrhs, dental operations, etc. Applied in 1 to 3 per cent. solution, 5 per cent. snuff or pure. Dose, 1/12 to ¼ gr. Hyp. inj. 14 min., of 1 to 1,000 solution...15 gr. vials, ea. 1.00

Colchicine. Amorphous, active principle of colchicum. The crystalline (chloroformic-colchicine) is a combination of colchicine with chloroform. Prismatic, bitter, crystals, very soluble in A., C., E., less so in E. and glycerine, insoluble in cold water. Anti-rheumatic; gout, etc. Very *poisonous*. Dose, 1/150 to 1/100 gr. Antidotes—stimulants.
15 gr. vial, ea. .55

Coniine hydrobromate. From Conium maculatum. White, prismatic crystals or powder. Soluble in 2 water, 2 A. Antispasmodic, paralyzing respiratory muscles, antineuralgic. Tetanus, inj. 1/12 to ⅛ gr. every 2 hours. Whooping cough or cardiac asthma 1/30 to 1/12 gr. 3 to 5 times daily. Children, 1/60 to 1/30 grs. 2 to 4 times daily.
15 gr. vials incl., each .50

Convallamarin. Glucoside, from Convallaria Majalis. Brownish white bitter powder. Soluble in water, A. Powerful heart tonic, resembling digitalin, but *not* cumulative. Dose, ½ gr. every 1 to 2 hours, gradually increased to 5 gr.
15 gr. vial incl., each .75

Convallarin. Glucoside from Convallaria Majalis, not to be confounded with Convallamarin. Crystals very soluble in A., insoluble in water. Drastic purgative.
15 gr. vial incl., each .60

Coronilla varia. (Coronilla bigarée, nat. ord. Leguminosæ.) The entire plant is used. Cardiac, dose of drug, 30 to 60 grs., of extract, 15 to 30 grs.

Coto. The bark of Palicura densiflora. Bitter, aromatic, pungent taste. Antisudorific, antidiarrhœal (phthisis, typhoid fever, etc.) Dose of 10 per cent. tincture, 50 drops 3 times daily.

Cotoin. Yellowish white powder, slightly soluble in water, freely in A., E., C., and alkalis. Antisudorific (night sweats), antidiarrhœal (typhoid fever, cholera, etc.) Dose, ¼ to 2 grs. dissolved in acetic ether 1 to 4.
⅛ oz. vials, oz. 14.00

Creatin, Constituent of muscular tissue. Opaque, white solid with bitter, acrid taste. The monohydrate occurs in transparent prisms. Soluble in 70 water. Muscular and digestive tonic. Dose 1½ gr. 3 to 5 times daily.

Creolin. Emulsion of carbohydrates from tar with rosin soap (Pearson) or with cresol-sulphuric acids (Artman). Brown, syrupy, liquid, pungent phenol-like odor and taste. Substitute for carbolic acid. Applied in ½ to 2 per cent. solution.
1 lb. bot. incl. lb. 50
1 oz. vial incl. oz. .15

Creosote carbonate. (CREOSOTAL.) Clear, oily liquid, free from taste and odor of creosote. Contains over 90 per cent. creosote. Insoluble in water, soluble in oils. Antitubercular. Dose 60 min. daily, in divided portions, increasing to 4 fl. drs.....oz. 75

Creosotal. See Creosote carbonate.

Cresalol. (ORTHO-, META-, AND PARA-CRESOL SALICYLATE.) White bulky crystalline powders resembling salol. Insoluble in water, readily soluble in A., E., slightly in oils. More powerfully antiseptic than carbolic acid though less poisonous and milder in physiological action. Intestinal antisepsis (para- the one most commonly found in shops) vesical catarrh and articular rheumatism. Dose 1 to 2 drs. daily in divided doses. Also applied externally like iodoform. Para.....oz. 1.75

Cresol iodide. Very light, yellow powder with disagreeable odor; readily soluble in A., E., C., and oils. Insoluble in water. Adheres to hands, instruments, etc., like resin. Antiseptic, allaying inflammation in nasal diseases.

Cresols. Higher homologues of phenol. More actively antiseptic and less poisonous. See trikresol.

Cresylal. See Trikresol.

Croton-chloral. See butyl-chloral hydrate.

Daturine, alkaloid. From Datura stramonium. Probably identical with hyoscyamine. The sulphate is usually employed. Sulphate
15 gr. vial, each 1.50
5 gr. vial, each .75

Dermatol. (BISMUTH SUB-GALLATE.) Odorless, stable saffron-yellow powder. Antiseptic siccative, vulnerary. As dusting powder, on wounds, ulcers, etc., in ointment or on gauze. Also intestinal antiseptic. Dose 30 grs. daily...oz. .52

Desinfectol. Analogous to Creolin.

Diabetin. Levulose, or invert sugar Recommended as a substitute for cane sugar in diabetes meltitus.
lb. 2.00

Diamine. (HYDRAZINE.) Small colorless crystals, analogous to hyroxylamine hydrochloride, powerful reducing agent, poison to life of all kinds. Destroys mold, germs, bacteria, etc.

Diaphtherin. (OXYQUINASEPTOL.) Bright yellow powder, readily soluble in water. Non-toxic antiseptic application (1 per cent. solution) in wounds and purulent discharges in affections of the nose, ear, mouth, etc.
1 oz. .50

Diaphthol. Yellowish white crystals, slightly soluble in water. Non-toxic antiseptic.

Dichlormethane. See Methylene Chloride.

Digitalin, German. (DIGITALEIN, Fr.) Not to be confounded with the French. White powder freely soluble in water, dil. A, insoluble in strong A, E, C. Heart tonic, slows the heart beats, antiaphrodisiac, diuretic. Dose $\frac{1}{64}$ to $\frac{1}{32}$ gr., 3 or 4 times daily. MAX. dose single $\frac{1}{16}$ gr. daily $\frac{1}{3}$ gr. Antidotes: tannin, nitroglycerin, later strophanthus.
$\frac{1}{8}$ oz. vials, oz. 6.50

Digitalin, French.—Not to be confounded with the German Digitalin, which see. Occurs in two forms, crystalline, and as an amorphous yellowish white powder, the latter being official in the French codex. Indications the same as for the German, but used in *smaller* doses. Dose $\frac{1}{20}$ to $\frac{1}{16}$ gr. 3 or 4 times daily.

Digitalein, Schmiedeberg.—Pale yellow amorphous powder, said to combine the properties of digitalin and digitoxin. Readily soluble in water and A.

Digitoxin. The most poisonous of the glucosides of digitalis. Insoluble in water, soluble in C., white tufts of acicular crystals. Dose $\frac{1}{200}$ to $\frac{1}{100}$ gr. *daily.*

Di-iodoform. (ETHYLENE PERIODIDE, TETRA-IODO-ETHYLENE). Yellowish white needles, almost odorless, decomposed by light. Insoluble in water, sparingly, soluble in A., E., very soluble in C., benzene. Contains 95.28 per cent. iodine. Substitute for iodoform.....oz. 3.50

Diphtheria Antitoxin. (DIPHTHERINE, etc.) Product of metabolism in blood serum, in the organism under the influence of diphtheria toxin. By intravenous injection either as prophylactic or therapeutic. Limpid liquids. Must be kept sterile and aseptically injected under the ribs, in the loins or the inner surface of the thighs.

Aronson's (SCHERING'S).—Hyp. inj. for immunising adults and older children, 16 min.; for smaller children, 8 min. Immunity lasts several months. If already attacked repeat the injection once or twice. 80 min. vials,.....each 3.50.
32 min. vials.....each 1.50.

Behrings. No. 1 equals 600 immunizing units; No. 2, 1,000; No. 3, 1,500. Hyp. inj. one-fourth of a vial. No. 1 as prophylactic, regular treatment full contents of either strength according to case. In ½ oz. vials, varying measure but full unit value, No. 1, 5.00; No. 2, 8.00; No. 3, 12.00.

Gibier's. (N. Y. Pasteur Institute), identical with *Roux's.* Immunizing power minimum 1:50,000, i.e., 1 ccm. prophylactic up to 110 lbs.; regular treatment 25 ccm. per day. In 7 cc. vials, 1.25; in 25 cc. v. 3.00.

Roux's. Same description as *Gibier's.* Not exported out of France, hence not available.

Dispermine. See Piperazine.

Dithiosalicylic acids. See sodium salts.

Dithion. Mixed sodium salts of the two dithiosalicylic acids. Used by veterinarians in 5 per cent. solutions for irrigating wounds, as dusting powder or as 10 per cent. salve in harness sores, erysipelas and strangles. Excellent prophylactic in foot and mouth disease. Dose, 6 to 14 drachms mixed with the food.

Diuretin. (SODIO-THEOBROMINE SALICYLATE.) White powder of saline taste, soluble in ½ hot water, remaining in solution on cooling. Contains 49.7 per cent. theobromine and 38.1 per cent. salicylic acid. Protect from the air. Diuretic, strengthening instead of depressing the heart. In dropsy, hepatic cirrhosis, and various diseases of the heart and kidneys accompanied by edema. Dose, 15 to 20 grains 4 or 5 times a day. Incompatible with acids or alkalis.
oz. 1.75

Duboisine sulphate. Yellowish hygroscopic powder. Cardiac and respiratory stimulant, mydriatic, sedative. More rapid and less irritant than atropine as a mydriatic. Applied in 1 or 4 to 500 solution. Dose, $\frac{1}{30}$ to $\frac{1}{20}$ gr.....15 gr. vials, each 1.60
10 gr. vials, each 1.10
5 gr. vials, each .70

Dulcin. (SUCROL, PARA-PHENETOL-CARBAMID.) White crystalline powder, soluble in 800 water, 25 A. Decomposed on prolonged boiling. 250 times sweeter than sugar; no untoward effects.....oz. 1.00

Dialdehyde. Synonym for Paraldehyde.

Emol. A substance analogous to Fuller's earth. Used in dressing wounds. Prop'y:.....doz. 4.00

Ergotole. A concentrated permanent preparation of ergot, 2½ times as strong as the fluid extract. It does not produce nausea, and when used hypodermically causes no irritation. Dose, 5 to 20 minims hypodermically, or 30 minims by the mouth.
oz. .50

Erythrophleine hydrochlorate. Yellowish granules, easily soluble in water. Local anæsthetic; slower, but more intense than cocaine. Applied in $\frac{1}{50}$ to $\frac{1}{10}$ per cent. solution as collyrium or inj.
5 gr. vials each 1.25.

Eserine salicylate. Colorless or yellowish, lustrous crystals, soluble in 150 water, 12 A. Solutions turn red. In opthalmic practice 1 to 3 in 450. In convulsive affections and deficient peristalsis. Dose, $\frac{1}{100}$ to $\frac{1}{50}$ gr. Sulphate is used for colic in horses and cattle in doses of 1½ gr. ANTIDOTES—Chloral, atropine, artificial respiration, etc.....5 gr. v. 75

Ether, hydriodic, etc. See Ethyl.

Ethyl Bromide. (BROM-ETHYL, ÆTHER BROMATUS, MONOBROM-ETHANE). Not to be confounded with ethylene bromide. Colorless, limpid volatile liquid, with sweet chloroformic odor and burning taste. Not miscible with water. Decomposed by light and air. General anesthetic in minor surgery, inhalation of 3 to 5 or 6 drachms producing anesthesia in 30 to 60 seconds. First pour a few drops in the mask, then about 2 drachms. Caution required with consumptives or those with cardiac or renal diseases. Internally in 5 to 10 drop doses as sedative anodyne.
C. P. imp. 1 oz. sealed tubes oz. .35
Domestic 1 oz. bot. .25

chloride. (MONO-CHLOR-ETHANE) gas at 50° F. In sealed tubes for local anesthesia. Break off point of tube hold in hand 6 to 10 inches from point to be anæsthetized VERY INFLAMMABLE..10 gm. tubes, ea. .30

iodide. (HYDRIODIC ETHER.) Colorless, neutral, non-inflammable liquid, very volatile. Alterative (chronic rheumatism, scrofula, secondary syphilis). Dose internally 3 to 9 min. in capsules. Antispasmodic resorbant (bronchitis, asthma, chronic laryngitis). 10 to 15 drops by inhalation.....1 oz. tubes ea. .50

Ethylene bromide. (DI-BROM-ETHANE.) Not to be confounded with Ethyl bromide. Brownish liquid with a chloroformic odor and taste. Insoluble in W., soluble in A., E., C., oils. POISONOUS WHEN INHALED. Sedative, substitute for bromides in epilepsy. Dose, 6 to 12 drops in capsule or emulsion, 2 or 3 times daily .....oz. .75

Eucalyptol. Colorless liquid with camphoraceous odor. Insoluble in W., miscible with A., E., C., and oils. Externally as a stimulant in rheumatism and neuralgias and in the antiseptic treatment of ulcers, gangrene, etc. Antitubercular, antiseptic, antimalarial. Dose, 10 to 15 drops in capsules or oily emulsion. Inj. same dose in oil. Antispasmodic (asthma by inhalation).
1 lb. lb. $3.35 @ 4.60
1 oz vial oz. .34 @ .47

Eugenol. (EUGENIC ACID.) Aromatic oily liquid, turning brown on exposure to the air. Powerful antiseptic, superior to phenol. Suited for dentristy. Febrifuge. Dose, 45 min. daily.....1 oz vials oz. .50

Eugenol-acetamide. Lustrous crystals soluble in W., A. Local anesthetic in dentistry. Not in the market.

Eulyptol. (ULYPTOL.) Said to be a mixture of carbolic and salicylic acids and oil of eucalyptus. Antiseptic, etc. Not in the market.

Euonymin. Resin from Euonymus atropurpureus. Brown, or greenish-brown hygroscopic powder, soluble in W., almost insoluble in A. Hepatic stimulant. Laxative. Dose, ⅛ to 3 grs.

Euphorin. (PHENYL-URETHANE.) White crystaline powder, with faint aromatic odor. Insoluble in W., soluble in A. and diluted A. Antipyretic, antirheumatic. analgesic in neuralgia, etc. Applied pure in ointment in venereal and other ulcers. Dose, 6 to 10 grs., 3 or 4 times daily.....25 gm. 1.12
oz. $1.50

Europhen. (DI-ISOBUTLY ORTHOCRESOL-IODIDE.) Amorphous, bulky, yellow powder of faint, saffron-like odor. Solubilities same as iodoform. Incompatible with starch, metallic oxides and mercurials. Decomposed by light and heat. Antiseptic cicatrisant, substitute for idoform, in same doses, etc., oz..1.80

Exalgin. (METHYLACETANILID). Acicular needles, difficultly soluble in cold, readily in warm W., A. Antineuralgic, analgesic. Dose, ½ to 4 grs. in powder or elixir. Max. single dose 5 grs., daily 12 grs.
1 oz. 1.40

Ferratin. Reddish brown powder, containing 6 per cent. of iron in organic combination. The iron element of food. Tonic, etc. (Anemaic conditions). Dose, 4 to 5 grs. 3 or 4 times daily.....1 oz. 1.15

Fluorescein. (RESORCIN-PHTALEIN.) Resorcin derivative. Reddish brown powder, soluble in A. and alkaline solutions. Used in ophthalmology to stain abrasions of the cornea. Formaldehyde.

Formalin. (FORMOL,) A 40 per cent. solution of formaldehyde gas in water. Antiseptic, deodorant. For sick room use spray of 1 per cent. solution (formalin 1 oz., water 4 ozs.). Does not affect delicate fabrics. Preserving anat. specimens, etc.....1 lb. bot., 1.50
DUSTING POWDER, containing 20 per cent. formalin.....½ lb. box, .50
FORMALITH. Tablets of kaolin, 50 per cent. formalin..¼ lb. tins, 1.50

Formanilid. Prismatic crystals, soluble in water and A. Analgesic, anesthetic, antipyretic and hemostatic. Dose, 4 to 8 grs.....1 oz. 1.00

Gaduol. (ALCOHOLIC EXTRACT OF COD LIVER OIL. Morrhaul.) Brownish-yellow oily liquid; bitter, acrid taste. Same uses as cod liver oil. Dose, 5 to 16 min. in capsules,
1 oz. vials, .57

Gallacetophenone. (GALLACOTOPHENONE.) Pyrogallol derivative. Pale yellow powder, soluble in hot water, A., E., glycerin, and in 30 per cent. solution of sodium acetate. Substitute for pyrogallol, as harmless, non-staining effective application in psoriasis and eczema. Applied in 10 per cent. ointment.
oz. 1.75

Gallal. (BASIC ALUMINUM GALLATE.) Brown amorphous insoluble powder. The stable, double ammonium salt crystalizes in lamellæ and is soluble in water. Topical astringent, disinfectant (ozena, etc.).
Not in the market.

Gallanol. (GALLIC ACID ANILID.) Small white odorless crystals, slightly bitter taste, soluble in A., E., hot water; insoluble in benzene, C., cold water. Substitute for pyrogallol and crysophanic acid. Non-toxic, non-staining application in psoriasis or eczema in 2 to 10 per cent. ointments or dusting powder.
1 oz. vials, 1.00

Gallobromol. (DIBROMGALLIC ACID.) Fine white needles, soluble in 9 cold water, freely in hot water, A., E. Germicide, antiseptic, astringent 2 to 4 per cent solution (gonorrhœa, etc., by injection). Sedative; dose 30 to 40 grains without the depressant effect of potassium bromide.....1 oz, vial, 1.25

Glucusimide. (GLUSIDE.) See saccharin.

Glutin-peptone Sublimate. Contains 25 per cent. of mercuric chloride. White, lustrous, hyroscopic, stable powder. In commerce mostly in 1 per cent. solution. Prompt, efficient mercurial in syphilis, Dose 1 Pravaz syringeful of the 1 per cent. solution subcutaneously (⅙ gr. mercuric chloride.) Not in the market.

Gold Mono-bromide. Yellowish-gray, very friable mass; insoluble in W. Antiepileptic, antisyphilitic. Dose ⅛ to ¼ gr. Anodyne (migraine, etc.) $\frac{1}{20}$ gr. twice daily before meals.....15 gr. vials ea. 2.25
..... 5 gr. vials ea, 90

tri-bromide. Soluble in water. Therapeutics and dose same as mono-bromide. 15 gr. vials, ea. 1.50
..... 5 gr. vials ea. .75

Guaiacol. (METHYL-PYROCATECHOL; MONO-METHYL-CATECHOL). Constituent of creosote. Colorless or light straw-colored limpid liquid, of agreeable aromatic odor. Soluble in A., E. benzene and 90 W. The C.P. occurs in crystals but is not dispensed except when "crystals" are ordered. Anti-tubercular. Dose 1½ min. increased to 5 min. thrice daily after meals
(C. P. cryst.. 1 oz. 1.50)..1 oz. .50

biniodide. Reddish brown powder soluble in A. and fixed oils, insoluble in water. Has an odor resembling iodine. Is easily decomposed. Recommended by the discoverer, Vicario, as an anti-tubercular. ....,

carbonate. White, neutral, crystalline powder, with very slight odor and taste. Insoluble in water, sparingly soluble in A. Contains 91.5 per cent. guaiacol. Daily dose 6 to 8 grains, gradually increased to 90 grs.....1 oz. 1.50

salicylate. (GUAIACOL-SALOL; SALICYL-GUAIACOL.) White, insoluble powder with little odor or taste. Anti-tubercular and intestinal antiseptic. Dose 15 grs.
oz 2.00

sulphaminol. See Sulphaminol.

Gymnemic acid. See Acid, gymnemic.

Gynocardic acid. See Acid, gynocardic.

Hæmalbumin. Stable powder, soluble in hot water, A. Contains the salts and albuminoid constituents of blood in the form of acid, non-coagulable albuminates. Roborant tonic (chlorosis, anemia, debility, etc). Dose, 15 grs. five times a day.

Hæmogallol. Reduction product of hæmatin. Red-orown powder, insoluble in water, insipid, odorless. Easily absorbable ferruginous preparation. (Anæmia, chlorosis, debility). Dose, 4 to 8 grs. 3 times daily in tablets...1 oz. vials oz. 1.25
Tablets (4 grs.) in boxes of 100 per box 1.25
Chocolate tablets in boxes of 100 per box 1.25

Hæmoglobin. The red coloring principle of the blood. Red-brown colloid or crystalline powder. Tonic, hæmatinic (anemia, chlorosis, etc). Dose, 1½ to 3 drachms daily in wine, or in tablets.

Hæmol. Action, dose, price, etc., same as Hæmogallol.

Helenin. Stearoptene from the root of Inula helenium, colorless, crystalline needles. Insoluble in water, soluble in hot A., E., oils. Demulcent, antiseptic. (Whooping cough, catarrh, chronic bronchitis, phthisis,) Dose, ½ gr. 10 to 12 times daily in pill. Applied in 2 per cent, oily solution.....15 gr. vials each. .50

Helianthus annuus. The flowers and the bark of the twigs are employed as a febrifuge and antiperiodic. Dose, 10 to 15 drops of a 10-per cent. tincture 3 or 4 times daily for children.

Heliotropin. See Piperonal.

Homatropine. Colorless, very hygroscopic crystals, slightly soluble in water. Action similar to, but weaker than atropine. The hydrobromate is most used.
15 gr. vials each. 6.00
5 gr. vials each. 2 25

Homatropine hydrobomate. White, non-hygroscopic leaflets, soluble in 10 water. Dose ½ gr. Mydratic. Less irritating and less persistent than atropine. 15 gr. vials each 4.50
5 gr. vials each 1.75

Homosalicylic acid. See acid, cresotic.

Hydracetine. (PYRODINE, ACETYL, PHENYLHYDRAZINE). Colorless hexagonal, odorless, insipid, lustrous prisms, soluble in 50 water. Antipyretic. Dose ⅛ to 1 gr. Maximum daily dose 2 grs. (Dangerous cumulative blood poison). Externally in 10 per cent. ointment in psoriasis like crysophanic acid.

Hydrastine alkaloid. Yellowish-white crystals, soluble in A., E., C., benzine. Practically insoluble in water. Tonic, antiperiodic. Dose ¼ to ½ gr.....oz. 6 00
15 gr. vial each .40

Hydrastine hydrochlorate. Pale yellow, crystalline powder, soluble in water. Astringent (gonorrhea, hyperidrosis, acne, seborrhea, etc.) ⅛ to 1 per cent. solution or 1 per cent. ointment.....oz. 6.00
15 gr. vials each .40

Hydrastinine hydrochlorate. Bright yellow hygroscopic odorless bitter crystals soluble in water. Haemostatic vaso-constrictor. (Hemorrhages, metorrhagia, etc.) Dose ⅜ gr. 4 to 5 times daily. Hypodermic injection 8 to 16 min. of a 10 per cent solution, once daily.
15 gr. vials each 1.00

Hydrazine. (DIAMINE). Allied to hydroxylamine hydrochloride. Reducing agent. Poison for both animal and vegetable life.

Hydronaphthol. White, lustrous scales, insoluble in water. Antiseptic (10 per cent. plasters in tinea tonsurans). Internally as intestinal antiseptic. (Typhoid or enteric fevers etc.) Dose 3 to 4 grs. every 2 hours. Preferably in keratin coated pill.

Hydroquinone. (PARA-DIHYDROXY-BENZINE; QUINOL). Long, colorless, dimorphous crystals, soluble in A., E., hot water, difficultly so in cold water. Antifermentative, antipyretic, antiseptic. Dose 8 to 12 grs. Largest use as photographic developer.....1 lb. cartons lb 4.40
1 oz cartons .38

Hydroxylamine Hydrochlorate. Colorless, hygroscopic crystals, resembling ammonium chloride. Soluble in W., A., substitute for chrysophanic acid in skin diseases, dangerous if absorbed. Applied in ⅛ to ⅓ per cent. solution. .....1 oz. vials .97

Hyoscine Hydrobromate. Colorless, odorless acrid crystals. Soluble in 2 W., 3 A., partially in E. C. Sedative, hynotic (acute mania 1/150 to 1/30 gr. Hypnotic inj. (mania) 1/150 to 1/60 gr. Antidotes same as for atropine.
15 gr. vials each 4.75
5 gr. vials each 2.00
3 gr. vials each 1.50

Hyoscyamine alkaloid. White, silky crystals. Slightly soluble in water, readily in A., E., C. Dose hypnotic, sedative (acute mania, ¼ to ½ gr. chorea, alcoholism 1/150 to 1/60 gr.) antiasialagogue, antispasmodic asthma, epilepsy, etc., 1/150 to 1/30 gr. Antidote same as atropine. C. P. cryst.....15 gr. vials each 5.00
5 gr. vials each 2.00
Pure Amorphous
15 gr. vials each 1.75

hydrobromate. Action etc., same as alkaloid. Pure amorpl.
15 gr. vials each 1.50.

Hypnal. (CHLORAL antipyrine). Small rhombic crystals, tasteless, odorless; soluble in 6 water. Hypnotic, analgesic. Dose 7 to 15 grs.....oz. 1.50

Hypnone. (ACETOPHENONE; METHYL-PHENYL-KETONE). Colorless, oily liquid, with a peculiar pungent odor and taste. Slightly soluble in water, readily in A., E., oils. Hypnotic, reduces arterial tension and slow respiration, hence should be administered with care. Dose 1 to 3 min.

Iatrol. Odorless powder. Substitute for iodoform.....1 oz. vials 1.00

Ichthyol. (AMMONIUM SULPHOICHTHYOLATE AMMONIUM ICHTHYOL SULPHONATE). Clear, reddish-brown, viscid liquid with bituminous odor and taste. Missible with water. Partially soluble in E., A. Antiseptic, vaso-contractor, alternative resolvent, gastric and renal tonic astringent. (Skin diseases, blenorrhagia, scrofula, syphilis, etc.) Applied in 5 to 50 per cent. ointment or solution. In gonorrhœa, 1 to 2 per cent. solution. Dose 3 to 10 min. 3 times daily.
4 oz. bot. oz. 37½
1 oz. vials .45
Pills.....100 in box, per box .75

Inulin. (ALANTIN.) DAHLIN ALANT-STARCH.) From Inula Helenium, white crystaline powder. Recommended for bread for diabetics. also as stimulant expectorant. Dose, 1 to 3 grs.

Iodantipyrin. (IODOPYRINE.) Colorless, tasteless, prismatic crystals, difficultly soluble in cold, readily in hot W. Antipyretic resolvent, etc. Same therapeutic action as antipyrin and sodium iodide would have separately. Dose, 8 to 24 grs.

Iodine tri-chloride. Orange-yellow, volatile needles, with a pungent, irritating odor; soluble in W., A., E. Powerful antiseptic and disinfectant (Indolent ulcers, skin diseases, blenorrhagia, etc.) Applied in 1 to 1,000 or 1 to 1,200 solution. Dose, 4 drachms of a 1 to 1,000 solution Use with caution..1 oz. vials oz. .97

Iodo Caffeine. Colorless crystals, soluble in W. Cardiac, amplifying the diastole (mitral stenosis) and in degenerative processes of the liver. Dose, 5 to 7 grs.

Iodocasein. Yellowish, odorless powder, recently put forward as a substitute for iodoform.

Iodo eugenol. Yellowish, insoluble, odorless powder. Antiseptic.

Iodol. (PETRA-IODOPYRROL.) Pale yellow, crystaline, bulky powder, without odor or taste; insoluble in water, soluble in 3 A., E., oils. Contains 89 per cent. iodine. Substitute for iodoform, being used in same manner. Dose, 8 to 15 grs. 2 to 4 times daily.
1 oz. vials, oz. $1.25

Iodol caffeine. Grayish crystalline powder containing 74.6 per cent. of iodol. Permanent. Said to have superior kolyseptic value to iodoform.

Iodo-phenine. (IODOPHENACETINE). Fine crystals resembling potassium permanganate, of feeble iodine-like odor, burning taste and colors the skin yellow. Incompatible with water, antiseptic, irritant.

Iron Albuminate. Scales, soluble in water; neutral, easily assimilated form of iron. (Anæmia, chlorosis, etc.) Dose 3 to 6 grs. 3 times daily.....1 lb, bot lb. 2.50
1 oz. vials, oz. .20

SOLUTION. Reddish brown liquid of agreeable taste, generally of 10 per cent. strength..1 lb. bot. lb. .50

solution (the original). DRESS. A perfectly neutral preparation, not duplicated by extemporaneous mixtures.....lb. .63

succinate. Amorphous reddish-brown insoluble powder. Antilithic. (Biliarycalculi.) Dose, one teaspoonful after each meal.
1 oz. vial, oz. .54

Izal. Resembling creolin, etc., contains varying proportions of cresols, hydrocarbons, water and glue, as an emulsifying agent.

Keratin, Peptonized. White powder, (hygroscopic, and therefore usually occurs commercially as brown mass), soluble in alkalis. As coating for pills intended to act only in the intestines, not in the stomach.
⅛ oz. vials, ea. .75

Kola. Nut of the Sterculia acuminata. Powerful nervous and muscular tonic. The fresh fruit and its preparations said to be much the more powerful. Dose 10 to 30 grs. 3 times daily in wine, fluid extract or decoction.....nuts, lb. .90
powd. 16.100

Koussein. Resinoid from Brayera Yellowish brown powder, readily soluble in A,, E alkalis; slightly so in W, Anthelmintic, Dose 25 to 50 grs, divided into 4 doses,
⅛ oz. vials ea. .75

Kresapol, Solution of crude cresols in soap, resembling lysol, etc. Antiseptic.

Kresin, Solution of cresylic acid in solution of sodium cresyloxylacetate Clear, brown liquid soluble in W., A. Antiseptic. Applied in ½ to 1 per cent. solution.
bot, lb. .60

Kresol, pure, liquefied. Pure crystals of ortho-cresol liquefied by addition of water as in carbolic acid. (see Trikresol.)

Lactol. (BETA-NAPHTHOL-LACTATE.) Tasteless and soluble substitute for benzo-naphthol, as an intestinal antiseptic.

Lactophenin. (LACTYL-PHENETIDIN.) Soluble substitute for phenacetin, crystalline bitter powder. Antipyretic, anti-neuralgic, analgesic, and sedative (specific in typhoid). Dose; 8 to 15 grs. 3 to 6 times daily.....oz. 1.15

Lactucin. Active principle of lactucarium. White scales, soluble in 70 W., A. Sedative hypnotic.
Dose 1 to 5 grs.

Lantanine. Alkaloid from Lantana brasiliensis (Yerba Sagra d a). White, bitter powder. Antipyretic and Antiperiodic, similar to Quinine. Dose: 15 to 30 grs. a day, in pills, immediately after a febrile attack.

Leptandrin. Glucoside from Leptandra. Hepatic stimulant, purgative. Dose, stimulant, 1 to 3 grs.; purgative 8 grs.

Lithium dithiosalicylate. Antirheumatic.

diuretin. See Uropherin.

symphorol. See Symphorol.

Lobeline sulphate. From the leaves of the lobelia inflata. Yellowish white, rather hygroscopic powder. For bronchitis, dyspnœa, and spasmodic forms of asthma. Dose 1 to 6 grs. either internally or hypodermically.

Loretin. (META-IODO-ORTHO-OXY-QUINOLINE-ANA-SULPHONIC acid). Pale yellow, odorless, crystalline powder, insoluble in E., C., benzene and oils, slightly soluble in W., A. Uses and dose same as iodoform, for which it is a substitute. Forms emulsions with oily fluids...oz. 1.00

Losophan. (TRI-IODO-META-CRESOL). Colorless, odorless crystals, insoluble in W., slowly in A., easily in E., C., fatty oils; contains 78.4 per cent. iodine. In parasitic skin diseases in 1 per cent. solution or 1 to 3 per cent. ointment.....oz. 1.80

Lycetol. (DIMETHYL-PIPERAZIN TARTRATE.) Proposed as a substitute for piperazin. Granular, rather hygroscopic powder, readily soluble in water. Antirheumatic, diuretic (gout, etc.) Dose, same as piperazine.....oz. 4.25

Lysol. 50 per cent. saponaceous solution of cresols. Brown, oily, looking clear liquid, with feebly aromatic tar-like odor, miscible with water, A., E., C. and glycerin. Powerful antiseptic, only ½ as toxic as carbolic acid. Antiseptic, in gynæcology, general surgery, etc.....1 lb. bot. lb. .60

Malakin. (SALICYL-PHENETIDINE MALACIN.) Composed of salicylic *aldehyde* with para-phenetidine. Salophen is a compound of the same base with salicylic *acid*. Small bright yellow needles, insoluble in water, sparingly in A. Slow, mild, antipyretic (fever of phthisis), analgesic (neuralgia), anodyne, free from bad after effects. Antirheumatic. Dose, 15 grains 4 to 6 times daily.....oz. 1 50

Mallein. Extract of the cultures of glander's bacillus. Useful in veterinary diagnoses like tuberculin. Fever following injections indicates presence of glanders.

Manganese albuminate. Yellowish white scales, soluble in water.

saccharate. Brown powder, soluble in water. The albuminate, peptonate and saccharate have been recommended in the same way as hæmogallol.

Mercury Amido-propionate. (ALANTINATE) White crystalline powders. Soluble in 3 water. Antisyphillitic. Dose, 1-12 to ¼ gr. daily, either by the mouth or hypodermically.

and zinc cyanide. White powder, insoluble in water. Antiseptic, non-irritant dressing,

Mercury benzoate. Colorless, tasteless, odorless crystals, sparingly soluble in cold water, more so in hot water, A. Subcutaneously in syphilis like mercuric chloride.

gallate. Dull, greenish-black powder, contains 37.17 per cent of mercury. Antisyphilitic, without the disagreeable properties of chloride or sub-iodide. Dose 1½ to 3 grs. daily in pill form.

gluten-peptonate. See Gluten-peptone sublimate.

salicylate. White, odorless, tasteless, neutral powder, contains 59 per cent. of mercury. Insoluble in water, A., soluble in solution of sodium chloride. Antisyphilitic antiseptic. Applied in one per cent. powder (chancre, etc.) or in 2 to 10,000 solution (gonorrhœa). Dose 1/10 to ⅓ gr. in pill form... .....oz. .49

tannate.—Closely resembles the gallate. Antisyphilitic. Dose 1 to 2 grs., half to one hour after meals.

thymolate.—Colorless or reddish powder, odorless or with faint thymoloid odor.

thymol acetate —Colorless crystals, insoluble in water. Antisyphilitic, Intra-muscular injection. ⅓ to ½ gr., also in pill.....oz. .75

Methacetin. (PARA-ACETANISIDINE; PARA-OXYMETHYL-ACETANILID.) Lustrous, colorless, or reddish, odorless scales. Almost insoluble in cold water; readily soluble in hot water, A., C., glycerin and fatty oils. Antipyretic, principally in children. Dose for children 2 to 4 grs.....oz. 1.50

Methozine. Synonym for antipyrine.

Methyl chloride. Gas at ordinary temperatures; tubes of the gas liquefied under pressure are used. The nozzle of the tube being opened, the fine stream that issues is directed against a tampon of wool or cotton covering the area to be anæsthetized. (Sciatica, lumbago, intercostal neuralgia and minor surgery,).....oz. .60

Methylal. (METHYLENE-DIMETHYL-ETHER.) Limpid, colorless liquid, with penetrating ethereal odor. Soluble in water, A., E., oils. Not inflammable. Local anæsthetic, hypnotic, sedative. Dose, 60 to 75 mins. in syrup. Locally as liniment (1 to 6 in olive oil).....oz. 1.35

Methylene blue. (TETRA-METHYL-THSILNINE CHLORIDE.) An aniline derivative. The medicinal is free from the zinc present in the commercial dye. Small blue-bronze, scaly crystals, slightly soluble in water. Analgesic, anodyne, (neuralgia, rheumatism). Antiperiodic (malaria). Dose, 1 to 4 grs. 5 times daily in capsules. Hyp. inj. 1 gr.....oz. .75

Methylene chloride. (DICHLORMETHANE.) Colorless liquid, resembling chloroform in odor and solubilities, though rather more inflammable. Substitute for chloroform, but less safe; also as spray for local anæsthesia. (Do not confound with "English methylene chloride," or "methylene," which is a mixture of ethyl ether and methylene chloride. A mixture of chloroform and methyl chloride has also been known in commerce as methylene chloride).

Microcidin. (SODIUM BETA-NAPHTHOLATE.) Whitish powder, soluble in 3 W. Antiseptic (wounds, ozena, rhinitis, etc., 0.3 to 0.5 per cent. aqueous solution.) Antipyretic.
oz. .50

Migranin. (CITRATE OF CAFFEINE AND ANTIPYRINE.) Caffeine, 8.2, antipyrine, 89.4, citric acid, 0.56 per cent. Analgesic, antineuralgic, specific in migraine. Dose, 17 grs., repeat if necessary in two hours.
oz. $1.35

Mollin. Super fatted soap with 17 per cent. of excess of fat.....lb. 1.00

Morphine Borate, and also the phthalate have been recommended for subcutaneous injection.
⅛ oz. vials ea. .70

Morrhuol. Alcoholic extract of cod-liver oil; brownish yellow, oily liquid; bitter, acrid taste. Same uses as cod-liver oil. Dose, 5 to 15 min., in capsules.....1 oz. .50

Muawin. Glucoside from the muawi tree of Mozambique. The action resembles that of digitalin.

Napelline, From aconitum napellus. white powder soluble in water, A., E. Anodyne, analgesic. (Neuralgia, rheumatism, etc.) Dose ⅛ to ½ gr.....5 grs. vials, ea. 1.25

Naphthalin. (NAPHTHALENE.) Small, white, lustrous, aromatic scales. Antiseptic, disinfectant. Applied as dusting powder (eczema, psoriasis, etc.) or etherial solution on gauze and wool in treatment of wounds. Anthelmintic. Inhalant in whooping cough. Diarrhœa, typhus, etc. Dose 5 to 15 grs. C. P. cryst.....oz. .20

Naphthol, alpha.—White or reddish prisms, disagreeable to the taste, soluble in A., E., hot water, slightly so in cold water. Antiseptic, chiefly used in the arts. Recrystallized.....oz. .30

aristol. (DI-IODO-BETA-NAPHTHOL.) Recommended as an antiseptic. Has attracted but little attention.

beta-. White or pale yellowish scales. Readily soluble in A., E., C., B., oils and alkalis, sparingly so in water. Antiseptic, antifermentative. Cutaneous, parasitic affections (scabies, tinea tonsuraus, etc.) Applied in 2 to 10 per cent. ointment or solution. Dose, 3 to 8 grs. Preservative for anatomical preparations.

benzoate. See benzonaphthol. oz. .16

carboxylic acid. (ALPHA [OR BETA] OXYNAPHTHOIC ACID.) Colorless acicular crystals. Sparingly soluble in water, soluble in 10 A., and alkalis. Antiseptic, disinfectant. Applied in ½ to 1 per cent. solution (scabies, etc.), or 10 per cent. ointment.

Naphthosalol. See Betol.

Narceine hydrochlorate. Shining crystals, difficultly soluble in water, easily in A. Hypnotic, anodyne, sedative. Dose, ⅛ to 1 gr.

Nasrol. See Symphorol.

Neurodin. (ACETYL-PARA-OXY-PHENYL-URETHANE) Colorless, odorless, crystals slighty soluble in cold water, easily in hot water. Antipyretic, (typhoid fever, scarlatina, etc.) analgesic. (neuralgia, migrain, etc). Dose 8 to 25 grs.

Nuclein. An extract of calf's milt, yellowish white powder, soluble in alkaline fluids. Diagnostic for tuberculosis. Dose 30 to 45 grs. per or half that subcutaneously.
½ oz .75; 1 oz. 5.00

Oleo-creosote. Combination of beechwood creosote with oleic acid. Straw-colored oily liquid containing 35 per cent. combined creosote, same indications as creosote and said to be borne better in large doses. Dose ¾ to 2½ drachms daily. Also subcutaneously.
oz. .70

Oleo-guaiacol. Combination of guaiacol with oleic acid. Same indications as guaiacol.

Olelte. Jelly-like ointment base formed by the action of sulphuric acid on castor oil.

Orexin. (PHENYL-DIHYDRO-CHINAZOLONE.) Originalny the hydrochloride was used but the pure base is now put up as orexin. Appetizer in phthisis, chlorosis, cardiac diseases, nausea of pregnancy, etc., and after major surgical operations, in absence of gastric disease. Dose 4 grs. 3 times daily in wafers in draught of bouillon.....oz. 4.00

Ortho-cresol. See Trikresol.

Ouabain. Glucoside from the wood of Acocanthera ouabaio, also from the seed of Strophanthus glabrus. White, odorless, feebly bitter crystals, slightly soluble in cold water. Sedative (whooping cough). Dose, for children, 1-1,000 gr. every 3 hours.....gm. 6.75

Oxytoluic acids. See Acids, creosotic.

Papain. Digestive ferment from Carica papaya. Amorphous, whitish powder, very liable to change. Internally as an aid to digestion, externally in the removal of the false membranes of croup, etc. Dose, 1½ to 8 grs. in pill, powder, wine or syrup.....oz. 1.50

Papaverine hydrochloride. From opium. Intestinal sedative (Diarrhœa of young children), 1-12 to ¼ gr. 3 times a day.

Papoid. Digestive ferment from Carica papaya. White powder. Internally as an aid to digestion (Dyspepsia, etc.), externally to remove false membranes (Croup, diphtheria) and diseased tissue. Dose, 1½ to 8 grs.....oz. 3.00
TABLETS, plain, with soda bicarb., with boric acid, or with nux vomica, per 100.....1.00

Paracotoin. From the bark of a Bolivian tree called paracote. Very light yellow crystalline powder, free from odor and taste, difficultly soluble in water, E., more readily in A. Antiseptic, simple gastritis, diarrhœa of consumption and of cholera nostras. Antisudorific (colliquative sweating of phthisis. Dose 2 to 3 g).

Paraform. Polymeric modification of formaldehyde. White, crystalline, insoluble in water. Intestinal antiseptic.....oz. .65

Pelegin. An ethereal solution of antipyrine, cocaine and caffeine. Has been recommended for sea-sickness.

Pelletierine. (PUNICINE). Alkaloid from the root bark of punica granatum. Colorless liquid soluble in 20 water. Antihelmintic taenicide. Dose 5 to 6 grains followed in half an hour by a laxative of senna or jalap.

sulphate. Thick liquid. Uses, etc., under pelletierine. Dose 5 to 8 grs. followed by a purgative.
15 gr. vial each 1.75

tannate. Yellowish, pulverulent mass with astringent taste, soluble in 700 water and 80 A. Especially commended as being insoluble. Dose 25 grs. followed by a purgative. 15 grs. vial each .50

Pental. (TRI.METHYL-ETYLENE, BETA ISO-AMYLENE). Colorless, stable liquid, sp. gr. 0.72, insoluble in water, soluble in A., C. E. Vapor is highly inflammable. Anæsthetic. Dose 2 or 3 drachms by inhalation through Junker's apparatus.
tubes of 10 ccm., each .30

Perpoena. A white crystaline powder, almost soluble in W., soluble in A., and E. Analgesic, anodyne. Dose 5 to 10 grs.....oz. .50

Phenacetine. (ACET-PHENETIDINE.) Colorless, tasteless, inodorous, lustrous scales, sparingly soluble in cold water, more readily in hot water, and in 16 A. Dose, as antipyretic 8 to 12 grs. hourly or every two hours, as analgesic (neuralgia, rheumatism) 15 grs. Maximum daily dose 90 grs.
oz. 1.00

Phenolid. Said to be a mixture of acetanilid and sodium salicylate.

Phenolin. A solution of crude cresols in soap, resembling lysol.

Phenosalyl. A mixture of carbolic, salicylic and benzoic acids dissolved in lactic acid with or without the addition of glycerin. Clear syrupy liquid soluble in 15 water. Antiseptic (in surgery 1 to 2 per cent. solutions). 1 per cent. ointment.

Phenylacetamid. See Acetanilid.

Phenyl-hydrazin hydrochloride. Small yellowish white scales, soluble in A. Used as a test for glucose in urine.....oz. 1.00

Phenyl salicylate. See Salol.

Phenyl urethane. See Euphorin.

Photoxylin. A nitro-cellulose prepared from wood wool, resembling pyroxylon. Soluble in equal parts of E. and A. Leaves a stronger film than pyroxylon. Used in plastic surgery in 3 to 5 per cent. solution.

Phthalein resorcin. See Fluorescein.

Physostogmine salts. See Eserine.

Picrol. (POTASSIUM DI-IODO-RESORCIN-MONOSULPHONATE.) Analogue of sozoiodol. Colorless, odorless, crystalline powder acid in reaction; soluble in A. E. collodion, W. Contains 52.8 per cent. of iodine. Recommended as non-poisonos substitute for iodoform.

Pilocarpine hydrochloride. White, microscopic crystals, soluble in W., A., slightly in E. C. Powerful diaphoretic in diseases of the respiratory tract, rheumatism and cutaneous diseases. Antidote to ether, also in hair tonics. Dose, ⅓ to ½ grain per day.

Piperazine. (PIPERAZIDINE; ETHYLENIMINE; DIETHYLEN-DIAMINE; DISPERMINE.) Synthetic alkaloid. Vitreous, lustrous crystals, very soluble in W. Aqueous solution, strongly alkaline, but almost tasteless. Antilithic, antirheumatic (gout, etc.). Dose, 15 grs. daily in 1 pint of ærated water. Frequently combined with phenocoll.
154 gr. vials, each 1.50

Piperine. Alkaloid from Piper nigrum. When pure is colorless and has but little pungency; usually contaminated with resin, yellowish, pungent. Insoluble in W. E.; soluble in A. and acids. Laxative and antipyretic. Dose, 1 to 10 grs. in powder or pill.....oz. .64

Pipironal. (HELIOTROPIN.) Decomposition product of piperine. Small white crystals, soluble in A., E., insoluble in W. Antiseptic, antipyretic; chiefly employed in perfumery. Dose, 8 to 15 grs. every 3 hours.

Pixol. (RESOL.) Preparation of wood tar resembling lysol, which is from coal tar.

Polychrome. SEE ÆSCULIN.

Polysolve. (SOLVIN. PHINOL-SULPHORICINATE.) A mixture of 1 part phenol with 4 parts sodium sulphoricinate. Recommended for diphtheria. Said to produce toxic effects similar to those of saponin.

Potassium dithiocarbonate. Orange-red deliquescent crystals readily soluble in water. Used in 5 per cent. ointments in cutaneous affections like ichthyol.

osmate. Violet-red crystalline powder soluble in water. Usedcombined with bromides, in epilepsy, subcutaneously in neuralgias, goitre, etc. Dose ⅛ gr. Daily dose ⅛ gr.

Soziodol. See Soziodol.

Pyoctanin. The blue is apparently a mixture of methyl violets, the yellow in an auramine. Powder, soluble in 30 boiling, 75 cold water, 12 A., 50 glycerin, C. Antiseptic, disinfectant local analgesic. Applied pure or in solution.
¼ oz. vials each .50

Pencils. Blue or yellow, large or small.....each .75

Pyridine. Colorless, limpid liquid, of empyreumatic odor and biting taste. Miscible with water, A., E., benzine, fatty oils, Cardiac stimulant, locally in diphtheria, by inhalation (60 to 75 minims) evaporated and inhaled. In large doses poison. oz. .32

Pyrodine. See Hydracetine.

Quinalgen. (BENZALGEN; ORTHO-OXY-ETHYOXY-ANA-MONOBENZOYL AMIDO-QUINOLINE.) Colorless, tasteless crystals or powder soluble in acids. Practically insoluble in water, A. Analgesic (migraine, gout, rheumatism, etc.) Dose 5 to 15 grs. 3 to 4 times daily.....oz. 1.00

Resol. Preparation of wood-tar resembling lysol, which is made from coal-tar.

Resorbin. An emulsion of almond oil and wax with water, gelatin or soap, not stable.

Resorcin. (META-DIHYDROXY-BENZENE; RESORCINOL). Colorless or slightly yellowish crystals, with a barely perceptible urinous odor, and a disagreeable sweetish pungent taste. Soluble in water A., in soluble in benzene, C. Antiseptic, antipyretic. Applied like carbolic acid, but non-irritant and less toxic. Dose, sedative (naurea 1 to 2 grs., asthma 15 grs).....oz. .25

Resorcinol. Generally applied to Resorcin. The name has also been applied to a brown amorphous combination of equal parts of resorcin and iodoform. Has been used in the treatment of chancre, atonic wounds, gangrenous sores, etc.

Retinol. Distillation product of resin. Yellowish, viscid, oily liquid. Antiseptic, externally and internally in venereal and cutaneous diseases. Solvent for iodol, aristol, cocaine phenols, phosphorous, etc., the solution of the latter being very stable.

Rubidium and ammonium bromide. White, crystalline, soluble powder Recommended as a substitute for the potassium salt, but has not attracted much notice.
⅛ oz. vials, oz. 2.75

Rubidium iodide. Colorless crystals resembling potassium iodide in physical and therapeutic properties. Having a less depressing effect on the heart, and creating less gastric disturbance than the potassium salt. Dose, 2 grs. 4 times daily in milk.....oz. 1.25

Saccharin. Minute white scales soluble in 230 water, more soluble in alkaline media. Used as a sweetening. Antiseptic.....oz. 1 25

Salacetol. (SALICYL-ACETOL). White, shining, bitter leaflets very slightly soluble in cold water, scarcely, in hot water, soluble in 15 A. 25 castor oil. Intestinal antiseptic, anti-rheumatic. Dose, 30 to 40 grs. In diarrhoea give in castor oil before breakfast.

Salbromalid. (SALICYL BROMANILID.) See Antinervin.

Salicylamid. Colorless, tasteless, thin, transparent plates soluble in A., E., C., and 250 parts of water. Analgesic, antiseptic. Dose (ovarian pain, neuralgia, chronic rheumatism, etc). 3 to 5 grs. Daily dose 15 grs.

Saligenin. (SALICYLIC ALCOHOL). Colorless leaflets, of slightly bitter taste, soluble in water, A. Has been recommended for the same uses as salicylic acid.

Salipyrine. (ANTIPYRINE SALICYLATE.) White coarsely crystalline, odorless, sweetish powder, almost insoluble in water soluble in A. Antirheumatic, analgesic, free from unfavorable heart action. Dose, in acute articular rheumatism 15 grs. every quarter of an hour for two hours; in chronic rheumatism 1¾ drachms daily, influenza or neuralgia, 8 to 30 grs.
oz. 1.40

Salocoll. (PHENOCOLL SALICYLATE). White crystalline powder, soluble in water. Antipyretic, antirheumatic. Dose, 15 grs. 3 to 4 times daily.

Salol. (PHENYL SALICYLATE.) White, crystalline powder or tabular crystals, almost tasteless and with slight aromatic odor. Sparingly soluble in water, soluble in 10 A., ½ E., C. External and intestinal antiseptic, deodorant, antipyretic, antirheumatic. Applied in powder. Dose, 1 to 2 drachms daily in divided portions. For coating pills intended not to act in the stomach, dip the pills in melted salol, ¼ to ½ gr. giving coating to each pill.
oz. 32

camphor. (CAMPHORATED SALOL.) Mixture of 3 salol with 2 camphor. Colorless, oily liquid. Recommended in purulent inflammation of the middle ear.

Salophen. (ACETYL-PARA-AMIDO-PHENYL SALICYLATE.) Small white crystalline, odorless, tasteless scales, practically insoluble in water, soluble in A., E. Antineuralgic, antirheumatic (acute rheumatism, cephalalgia, migraine). Dose, 15 to 30 grs. for neuralgias, 1 to 1½ drachms for acute rheumatism.....oz. 1.00

Salumin. (ALUMIUM SALICYLATE.) Reddish white powder, insoluble in water. Astringent, disinfectant, (dusting powder in ozena, etc.)

Sanatol. A solution of crude cresols in sulphuric acid

Sanguinal. A preparation of fresh blood defibrinated and evaporated. In pill form each pill said to represent 1¼ grs. of fresh blood. In anemia, etc.

Santonitoxim. A derivative of santonin. White crystals, soluble in A., E., almost insoluble in water. Anthelmintic, less toxic than santonin. Dose, 2 to 3 years, 1 gr.; 4 to 6 years, 1½ grs.; 6 to 9 years, 2 grs; adults, 5 grs. Administer in two portions at interval of 1 to 2 hours.

Sapocarbol and Saprol. Solution of cresols resembling lysol.

Scillipicrin. Amorphous, yellowish white, very hygroscopic powder. Readily soluble in water. Powerful diuretic, reducing the activity of the heart. Dose, ⅛ gr.
15 gr. vials, ea. .35

Scoparine. Principle obtained from cytisus, scoparius. Diuretic. Dose, 8 to 15 grains internally or ⅙ to 1 gr. subcutaneously.

Scopolamine hydrobromide. Small crystals or crystalline powder, soluble in water. Resembling atropine in action, but 4 or 5 times as strong as a mydriatic without its unpleasant effect. Applied in $\frac{1}{10}$ to $\frac{1}{2}$ per cent. solutions as mydriatic.
5 gr. vials, ea. .05

Sodium chloroborate. White crystalline powder, soluble in water. Powerful antiseptic, both in medicine and as a preservative of meat.

dithiosalcylate. Grayish white powder, hygroscopic and very soluble in water. Antirheumatic, antiseptic, etc. Dose, 3 grs. 2 to 4 times daily. Also externally and for foot and mouth disease in veterinary practice.....oz. 1.20

ethylate. Brownish white powder, soluble in A. Esharotic, depilatory. Apply in 30 per cent. alcoholic solution. Chloroform arrests its action.
oz. 1.00

SOLUTION. B. P.....oz. .25
RICHARDSON'S.....oz. .50

formate. Minute, white deliquescent crystals, soluble in water. Antiseptic, anti-tubercular. Hypodermically. Dose, 3 grs.....oz. .40

paracresotate. White powder, soluble in hot water. Antipyretic, antirheumatic, intestinal antiseptic. Dose, 2 to 20 grs. 3 times daily.
oz. .75

silico-fluoride. White insipid crystalline powder, soluble in 200 water. Antiseptic, styptic. Applied in 1 to 500 aqueous solution.....oz. .34

sozoiodol. See Soziodol.

sulpho salicylate, acid. Crystalline powder of acid, astringent, taste, soluble in water. Antirheumatic. Uses and dose same as sodium salicylate.

tellurate. White powder, soluble in water. Antisudorific in night sweats of phthisis. Communicates garlic-like odor to the breath. Dose, 1 gr. daily.

tetra-borate. Transparent vitreous mass, soluble in water. Antiseptic. Uses the same as boric acid..oz. .54

Solanine. Alakoidal glucoside from solanaceous plants. Acicular crystals, almost insoluble in water. Not mydriatic; has been used as analgesic in neuralgia, the vomiting of pregnancy, bronchitis, asthma, etc. Dose 1-6 to 1 grain 3 times daily.

Somatose. Slightly yellowish, odorless, almost tasteless powder, soluble in water. Nutrient. Mixture of nutrient salts of meat and albumoses, in weakened digestion, (phthisis, carcinoma, etc.) $\frac{1}{2}$ to 1 oz. daily in milk, soup, etc.....lb. 5.00

Solveol. Neutral solution of sodium cresylate and sodium cresolate. Brownish black fluid, miscible with water. Antiseptic. Applied in $\frac{1}{8}$ to $\frac{1}{2}$ per cent. solution for washing and dressing wounds.
100 grm. bot. each .35

Sozoiodol-mercury. (MERCURY di-iodo-para-PHENOL-SULPHONATE). Yellow powder containing 31 per cent. of mercury and 38 per cent. of iodine; insoluble in water, soluble in salt water. Antiparasitic, antisyphilitic. Applied in 2 to 10 per cent. ointment or powder. Dose hypodermically 1¼ grs. dissolved in solution of potassium iodide.
oz. 1.50

Soziodol-potassium. Odorless white powder, soluble in 50 water. Antiseptic. Applied pure or in 10 per cent. powder in eczema, etc.....oz. 1.15

-sodium. This should be dispensed when simply *sozoiodol* is ordered. White odorless crystals, soluble in 14 water. Antiseptic, parasiticide. Applied in 1 to 10 per cent. ointment or solution. Dose internally, 15 to 45 grs. daily.....oz. 1.15

-zinc. White odorless powder, soluble in 20 water, A. Astringent, antiseptic. (Catarrh, gonorrhœa, leucorrhœa, etc.) Applied in 5 to 10 per cent. dusting powder, or as injection in 1 to 5 per cent. solution.
oz. 1.40

Sparteine sulphate. Salt of an alkalold from scoparius, colorless, bitter hygroscopic crystals, soluble in water, cardiac tonic resembling digitalin in action. Dose ¾ to 1½ grs. daily in divided doses.
15 gr. vials each 20 .....oz. 2.29

Spermine. A base obtained from the seminal fluid of various animals. Crystalline hygroscopic body soluble in water, A, insoluble in E.

SOLUTION, Poehl, 2 per cent. solution of the hydrochlorate. Nervous tonic. (Neurasthenia, locomotor ataxy, asthma, etc.) Dose 3 to 10 mins.
boxes of four Cc. tubes, box 7.50

Strontium salts. These salts have been recommended as preferable to the corresponding salts of sodium or potassium for the same diseases on the ground of being better borne by the system.

bromide, colorless soluble needles. Dose 30 to 60 grs.
oz., 16, lbs. 1.75

carbonate.....lb. .37

chloride.....lb. .30

iodide.....oz. .35

lactatate (in albuminura)oz..... .33

Strophanthin. Glucoside from Strophanthus. White amorphous or crystalline powder, soluble in water A. Noncumulative heart tonic, not disturbing the respiratory centres. Dose $\frac{1}{60}$ to $\frac{1}{30}$ gr.
5 gr. vials, each .20

Strychnine, arsenate. White, crystalline powder with bitter taste. Tonic and diuretic in phthisis. Dose, 8 to 15 drops of a half per cent. solution.....½ oz. each .38

Styracol. (Cinnamyl guaiacol.) Long needles. Internal antiseptic. (Vesical, catarrh, gonorrhea, etc., also in phthisis.)

Sublimate, gluten peptone. See Gluten peptone sublimate.

Sucrol. See Dulcin.

Sulphaminol. (THIO-OXY-DIPHENYL-AMINE.) Pale yellow, odorless, and tasteless powder. Soluble in alkaline solutions, insoluble in water, soluble in A. Antiseptic. Substitute for iodoform. Non-poisonous. Dose, 3 to 4 gr. three times a day.
⅛ oz. vial. each .25

Symphorol. (CAFFEINE SULPHONATE. NASROL.) Symphorol-N.— Sodium salt-L—lithium salt-S—strontium salt. They are all odorless, bitter, microcrystalline powders, soluble in W., insoluble in A., E., C. Diuretic, not affecting the nervous system. Dose, 15 grs. four times a day.....oz. 1.50

Tannal. (BASIC ALUMINUM TANNATE.) Brownish yellow insoluble powder. Astringent. (Chronic catarrh, etc.) By treatment with tartaric acid a soluble tannal is produced.

Tannigen. (DIACETYL-ACETAL.) Yellowish gray, tasteless, odorless, slightly hygroscopic powder. Insoluble in water and dilute acids, soluble in A. And in cold solutions of alkaliphosphates. Intestinal astringent passing the stomach undecomposed. (Chronic diarrhoea.)

Terpinol. Oleaginous substance with hyacinth-like odor. Insoluble in water, soluble in A. Bronchial stimulant. Dose, 8 to 15 grs..oz. .40

Terpineol. A thick, colorless liquid with hyacinth-like odor; present in terpinol. Recommended as a deodorant for iodoform.

Tetanus Antitoxin. Resembling diphtheria antitoxin in physical properties. Specific in tetanus.

Tetra-Ethyl-Ammonium Hydroxide. 10 per cent. solution. Clear, bitter, alkaline, caustic liquid. Uric acid solvent. (Gout, rheumatism, etc.) Dose, 8 to 20 minims, well diluted three times a day. Hypodermically 1 to 2 minims 4 or 5 times a day.....oz. 2.00

Tetronal. (DIETHYL-SULPHON-DIETHYL-METHANE.) Lustrous tabular crystals of a camphoraceous, bitter taste. Soluble in 450 water, readily soluble in A. Hypnotic like trionol but less powerful.

Thalline sulphate. (TETRA-HYDRO-PARA-CHINA-ISOL SULPHATE.) Yellowish, white, crystalline powder with an odor like cumarin and a saline, bitter, spicy taste. Soluble in A., very soluble in water, the aqueous solution being darkened on exposure to light. Antipyretic, antiseptic. (Gonorrhea, etc.) Reputed as poisonous for the red blood corpuscles and the nervous system. Dose, 2 to 8 grs.....oz. 2.04

Tartrate. Same uses and doses as the sulphate.....oz. 2.80

Theobromine Sodium Salicylate. See diuretin.

Thermodin. (ACETYL-PARA-ETHOXY-PHENYL-URETHANE.) Colorless, odorless, almost insoluble crystals. Antipyretic. Dose, 8 to 10 grs., two or three times daily.

Thilanin. (SULPHURATED LANOLIN.) Contains 3 per cent. of sulphur. External antiseptic (eczema, pruritus, etc.).....lb. 1.75

Thioform. (BASIC BISMUTH DITHIOSALICYLATE.) Voluminous, insoluble, yellowish, odorless powder. Non-poisonous substitute for iodoform. Dose 5 grs. 3 times daily.

Thiol liquid is a thin brownish-black neutral extract with a faint odor of birch oil. Miscible with water, partly so with alcohol. Dermal antiseptic. Substitute for ichthyol. Dose 1½ grs. in pill. Externally as powder (the dry) or in 5 to 15 per cent. liniment etc.

Thiophene. The sodium salt and the dioxide are antiseptics like iodoform.

Thio-resorcin. Yellowish gray tasteless insoluble powder. Substitute for iodoform.

Thiosapols. Soaps made from oils previously treated with sulphur. Employed in dermatology.

Thiosinamine. (RHODALLIN, ALLYL SULPHO-UREA.) Colorless or yellowish crystals, soluble in water, A., E. Reducing agent and antiseptic in lupus, etc. Causes softening of cicatricialtissue. absorbing of glandular swelling.....oz. 1.65

Thymacetin. White crystalline powder, difficultly soluble in water. Hypnotic, dose 5 to 45 grs.

Tolypyrin, Colorless crystals, soluble in water and A. Antipyretic, antirheumatic, antineuralgic, like antipyrine.

Tolysal. (Tolypyrine salicylate.) Colorless crystals almost insoluble in water and A. Antirheumatic. Dose, 15 to 90 grs.

Tribromphenol. See Bromol.

Tribromphenol Bismuth. See Bismuth tribromphenol.

Trikresol. Clear, colorless liquid of phenol-like odor, and turning yellow on exposure. Disinfectant, being three times as powerful as a disinfectant as carbolic acid. Applied in ½ to 1 per cent. solution.....lb. 80

Trikresolamine. A 4 per cent. solution of an equal mixture of ethylene diamine and trikresol. Antiseptic like trikresol, but less irritating. Applied in ½ to 1 per cent solution
oz. 80

Trional. (DIETHYL-SULPHON METHYL ETHYL METHANE.) Lustrous, bitter, tabular crystals, soluble in 320 water, readily in A., E. Hypnotic, resembling sulphonal, with less evil after effects. Dose 15 to 45 grs.

Tropa-Cocaine Hydrochlorate. Salt of alkaloid from Javanese coca, also prepared synthetically. Local anæsthetic more rapid and stronger than cocaine. Applied in 3 per cent. solution....5 gr. vials each .30

Tuberculin Koch. A transparent, yellowish liquid. Used principally to diagnose tuberculosis in cattle.
.....5 Cc. vials 12.25.

Tuberculocidin, Klebs. (ALEXIN T. C.) A modification of tuberculin.
.....5 C.c. vials 12.25

Tumenol. A mixture of sulphonic acids and sulphones. Antiseptic (eczema, itching, wounds, etc.) Applied in 2 to 5 per cent. solution or dusting powder.....oz. .60

Uralium. (CHLORAL-URETHANE.) Colorless crystals soluble in A., E., insoluble in cold water, decomposed by hot water. Hypnotic, better form than chloral.....oz.

Urethane. (ETHYL-URETHANE, ETHYL CARBONATE.) Colorless, odorless, crystals, readily soluble in water, A., E. Hypnotic, sedative, antispasmodic. Dose 30 to 45 grs. 3 times daily.....oz. .50

Uropherin. (LITHIUM DIURETIN.) Same as diuretin except that lithium is substituted for sodium. White powder soluble in water. Diuretic. Dose 15 grs. 3 to 4 times daily.....oz. .2.50

Valzin. See dulcin.

American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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DO not forget the A. P. A. meeting at Asheville. It promises to be a most enjoyable affair.

The druggists of Elwood, Ind., have inaugurated an early closing movement, looking to the closing of stores on Sundays between the hours of 10 and 4 o'clock. It is to be hoped that success will attend their efforts, and that movements of a similar kind will be started in other places. As men engaged in professional occupations pharmacists are entitled to more consideration from the public than they receive in the matter of office hours.

THE labor troubles in Chicago and other points West have greatly interrupted traffic, and many wholesale firms have experienced annoyance owing to the refusal of railway agents here to carry goods to the points of disturbance. The delay in the mail service from the West is responsible for the late appearance of this issue, as we held back for our Chicago letter.

WHILE America cannot lay claim to the doubtful honor of inventing the "trust," she has undoubtedly produced the most gigantic and successful of these mighty engines of commerce. A very interesting discussion of the subject of trusts, based upon a recently-issued history of "Trusts, Pools and Corners," is published elsewhere under that title.

THE General Council of the Society of Chemical Industry of London, England, have acceded to the request of the members resident in and near New York City, and have authorized the formation of a local branch of the society in this city. A meeting will soon be called to proceed with the organization of the local branch. The petition for permission to make the membership fee of the local branch five dollars instead of five shillings, could not be granted, that point being settled by constitutional provision.

OUR STUDENT'S COLUMN

UNDER the heading "Students' Column" we give in this issue a further instalment of the epitome of the organic Materia Medica of the U. S. Pharmacopœia, which was begun in our issue of May 17.

This article is one of a series to be printed at regular intervals in THE AMERICAN DRUGGIST, which is designed to supply in a convenient form for reference an effective means of memorizing the natural products and preparations of the Pharmacopœia.

The scope of the work has been enlarged since the publication of the first instalment by a list of *Synonyms* and *Constituents*, this addition being made in compliance with a wish to that effect expressed by one of the teaching staff of a leading college of pharmacy, who is favorably impressed with the work and believes that when completed it will prove of great valueu and tility to students as a convenient guide to the Pharmacopœia.

A POSSIBILITY OF FREE ALCOHOL AT LAST.

FOR years we have strenuously advocated the necessity of providing free alcohol for the arts so as to place the manufacturers of this country on something like an equal footing with foreign manufacturers who have duty-free alcohol with which to carry on their operations. This necessity has at last been recognized by the introduction of the following clause in the internal revenue bill in the Senate:

Any manufacturer finding it necessary to use alcohol in the arts, or in any medicinal or other like compound, may use the same under the regulations to be prescribed by the Secretary of the Treasury, and on satisfying the Collector of Internal Revenue for the district wherein he resides or carries on business that he has complied with such regulations, and has used such alcohol therein, and exhibiting and delivering up the stamps which show that a tax has been paid thereon, shall be entitled to receive from the Treasury of the United States a rebate or repayment of the tax so paid.

The move meets with opposition from the manufacturers of wood alcohol and from some importing houses, but there seems a fair prospect of its eventual adoption.

MEDICINE AND THE FREE LIST.

THERE seems to be at last a probability of final action on the tariff bill, and this prospect is welcomed with an almost universal sigh of relief by the business world. The bill as it now stands is a mass of inconsistencies, but with all its faults it were better to pass it at once (since it is to be passed) so that the commercial world may proceed in formulating plans with some definite information as to the tariff rates as a basis for operation.

In all lines of commerce the importing trade has been carried on in a from hand to mouth fashion for the past year. Instead of purchasing supplies of crude drugs for the entire season, importers have bought only sufficient to last them for a couple of months, fearing that through some possible tariff change they might be put at a disadvantage, should they have larger stocks on hand abroad.

That the bill as it now stands is open to improvement in many directions is admitted even by its warmest supporters, and among the changes which it would seem politic to make are the abolition of duty from several medicinal substances where the duty is almost entirely protective in its nature. On cod-liver oil, for instance, the total revenue last year was less than $29,000. This, while a mere bagatelle as a matter of revenue, was all paid indirectly by invalids who as a rule could ill afford it. Moreover, the imported oil does not to any great extent come into competition with the domestic oil, the consumption of which is almost entirely local in its character, being confined to those sections where the cod are plentiful. It is the Norwegian oil alone that is used in a large way, and no amount of protection would cause the substitution of the domestic oil for that from Norway, as the question of quality would overweigh- that of price.

Sulphur also is an article which might well be placed on the free list, both because the income from the tax is small, and because we have practically no free sulphur mines in the country. The duty on sulphur, it is true, has been of some benefit in directing attention toward the utilization of iron pyrites as a source of sulphuric acid for use in the manufacture of fertilizers, but since the methods employed are of foreign origin, being the invention of Swiss chemists, it will be seen that our own tariff has not played a very important role in the matter.

It is now almost too late to hope for any material changes in the bill, save such as have special interests at work in their favor, but it would certainly seem feasible to make several additions to the free list from schedule "A" without detriment either to the revenue or to the manufacturing interests of this country.

U. S. LIQUOR LICENSES FOR PHARMACISTS.

THE city liquor licenses in Louisville are almost prohibitive, and the pharmacists there have had hopes of avoiding the additional expense of the United States license on the ground that they could sell liquors on a phpsician's prescription without rendering themselves liable to classification as liquor dealers. A number of them applied to United States collector of internal revenue JOHNSON as to what construction he would place on the question. The following letter in answer to these queries makes plain the collector's position :

OFFICE OF UNITED STATES COLLECTOR OF INTERNAL REVENUE.
LOUISVILLE, KY., June 14, 1895.

R. Kampfmeuller, Druggist, Seventh and Broadway, Louisville, Ky.

DEAR SIR: In reply to your favor of yesterday, I beg leave to say that under Section 3246, Revised Statutes, a druggist is permitted to use spirits and wines, in combination with drugs, in preparing medicines that are not beverages, and to sell such medicines without paying special tax as a liquor dealer. But under the uniform rulings of the Commissioners of Internal Revenue and the decisions of the United States Courts a druggist cannot, without subjecting himself to this special tax, sell spirits or wines that are not combined with drugs or materials of a kind taking these liquors out of the class of beverages, even when he sells liquors on a physician's prescription and for medicinal use only.

As to the compounds called bitters, tonics, and the like, the rule is, if they are composed of spirits in combination with drugs, herbs, roots, etc., and are held out as remedies for diseases stated in labels on the bottles, they are to be regarded as medicines until the facts ascertained as to the purposes for which they are usually sold or used show them to be beverages. But every person who sells such tonics or bitters as beverages, either by the bottler or by the drink, or sells them knowingly to those who buy them for use as beverages, involves himself in liability to criminal prosecution under the Internal Revenue laws, unless he holds a special tax stamp as a liquor dealer.

The fact that a compound may be used as a medicine, and may be so intended by the person making it, does not relieve the seller from the liability of a liqnor dealer if the compound is intoxicating and is sold as a beverages.

The true test in all such cases is: Was the compound sold in good faith for medicinal purposes only, or was it sold as a beverage, or sold knowingly to persons who bought it for use as a beverage?

The druggist who sells spirits, vinous or malt liquors, even upon the prescription of a physician, incurs the penalty, unless he has paid the special tax. The addition of quinine, pepsin, ginger, or the like, simply to evade the law, will furnish no relief.

Respectfully,
(Signed) BEN. JOHNSON, Collector.

The very strict construction placed on the law by the United States authorities is apt to work a hardship in many instances, as the pharmacist seldom sells sufficient alcohol or alcoholic liquids to pay the twenty-five dollar tax.

Collector Johnson's view of the law, however, is rather more liberal than that held by some of the collectors, as it has been held by some of them that the sale of alcoholic tinctures, even for purely medicinal purposes, subjects the pharmacist to the necessity of taking out a U. S. liquor dealer's license. This is an injustice that should be remedied by Congress.

THE GOVERNMENT AND THE INDIVIDUAL.

PRECISELY where the line should be drawn which limits the freedom of action of the individual will by the interposition of governmental regulations, will ever remain a mooted question. The history of civilization shows a continual conflict between a tendency toward centralization of power on the one hand and an effort to preserve personal liberty on the other.

The limitation to be put on the exercise of the individual will, must vary with the environment. In a primitive condition of society the widest latitude is allowed, for strong individualism must be cultivated and encouraged, it being the foundation of the general welfare. On the frontiers of civilization we have reproduced, in a manner, the primitive condition existent in the earlier history of every people. There the individual has at once the largest liberty and the greatest responsibility. If he is improvident he suffers the full penalty of his faults, for there is no organized charity to lighten the evils of his lot.

If he incurs the enmity of his neighbor he must look to his own self-preservation, for there is no police protection extended him.

This large measure of personal liberty therefore carries with it a corresponding degree of personal responsibility, and conversely as the personal responsibility is lessened by the assumption of police and other duties on the part of the State, the personal liberty of the citizen must be abridged. The question always under discussion is: Where, under the special conditions, existent in the particular case under discussion, the line of governmental interference shall be drawn.

In the complex conditions of modern civilization there is evident, even in the most republican forms of government, a tendency on the part of the individual to delegate to the government an increasing proportion of responsibility and concomitant power.

Leaving aside the old blue laws which were the manifestation of an inherited religious intolerance, the history of legislation in the United States during the past fifty years, will show a steady tendency toward centralization of power in the hands of the government, whether State or national. A significant indication of this tendency is shown in the attitude assumed by the national government toward the strike of railway men, which has reached a

head within the week. Never before has the United States Government taken so active a part in affairs of this kind, and the precedent thus set will very likely be carried out even more assertively in the future.

The legal restrictions thrown about the practice of various callings grow every year more exacting, and the callings thus affected become every year more numerous. The regulation of the practice of pharmacy is now accepted as a matter of course. The question of the degree of restriction which shall be imposed is not so generally conceded. In this journal for June 28, on page 358, J. H. REDSECKER proposed the enactment of a law for the regulation of the manufacture and sale of proprietary medicines, which is radical in its departure from any existing precedent in this country.

His proposition is to so amend our national trademark laws as to give no proprietorship in medicines or in medicinal preparations, and by State legislation to require the registration of the formulas of proprietary medicines with the State Board of Pharmacy. To cover the cases of pharmacists making and selling household remedies in a small way, Mr. REDSECKER proposes that the restriction above indicated shall not apply to the preparation and sale of such remedies by registered pharmacists where their sales do not amount more than five hundred dollars annually.

Unless any proposed legislation is clearly for the good of the general public it can scarcely hope to become a law, and more particularly is this true where there are large monetary interests in opposition to it. The question then is whether the good to be accomplished by such enactment is sufficiently great to warrant the encroachment upon what we have come to esteem as individual rights at the present time.

In the light of the foregoing discussion of legislative principles it will be seen that the question of individual rights and individual liberty is largely one of environment; that we are gradually delegating to the Government larger powers in this direction with a consequent curtailment of the individual liberty. Have we now reached the stage when the step advocated by Mr. REDSECKER is advisable? We think not. The tendency is in that direction, but Mr. REDSECKER'S suggestion is as yet premature. Public opinion must determine these questions in a general way, and then this opinion will find its expression in legislation. This opinion may be shaped and moulded by agitation and discussion, and the pioneers are now making efforts which may bear practical fruit later on. The process of education in this direction will be a slow one, for it will be actively combated by manufacturing interests, and even by many unprejudiced and liberal minds; but if the present tendency of thought and legislation continue, governmental supervision of proprietary medicines will surely come about later on.

RE-REGISTRATION.

THE sociologic questions touched upon in the initial paragraphs of the above article come again to the fore in connection with the discussion of re-registration that is now going on in the older States.

At the meetings of both the New York and the New Jersey associations this year much time and thought was bestowed on the discussion of this subject. In New Jersey, for instance, the rolls show a total of registered pharmacists in the State of nearly three thousand, while it is probable that of this number not more than half are now actively engaged in the business. Under the present law, however, there is no means of removing the name of the registered pharmacist from the list when it has once been entered there; "once registered, always registered" is the theory upon which registration is conducted in most of the states.

The practical stimulus which brings about the discussion is a lack of funds on the part of the boards of pharmacy to adequately enforce the provisions of the laws. However much the pharmacists may protest against being compelled to pass an examination and pay a fee before being allowed to conduct a pharmacy, he appreciates highly the somewhat limited degree of protection which is afforded him against competition from unqualified competitors, and is quick to invoke the aid of the pharmacy board where such competitors set up within his domain of trade.

At the meeting of the New York State Association a very vigorous protest was presented from a disgruntled pharmacist at what he considered the laxity of the board in the discharge of what may be called its police duties. It is probable that the New York State Board, and in fact that every State Board of pharmacy accomplishes everything that it is possible to accomplish with the small incomes which these boards can count upon to carry on the police work necessary to the detection and prosecution of offenders against the pharmacy law. A supply of funds is, therefore, the first requisite toward securing a more rigid enforcement of the pharmacy laws. The point then to be considered, is where these funds shall be derived.

The only reasonable grounds upon which the enactment of any law is that it is conducive to the public welfare. We must assume, therefore, that the protection of the public from incompetents was the *raison d'être* of the pharmacy law. The public, then, should pay for the protection, and not make the body of pharmacists do so. The Government prosecuting officers should see to it that this law as well as any other is enforced.

This conclusion, while a logical, and we contend a correct one, under the premises fails of giving practical relief, for the public has not yet been sufficiently educated as to the benefits conferred upon them by the pharmacy law to be willing to admit the full justice of the conclusion. They will allow the passage of restrictive legislation, but as soon as they are asked for funds to secure its enforcement the cry of special or class legislation is raised, and the pharmacist must either himself bear the burden of its enforcement or must allow the law to become obsolete. While this is unjust it is in the present state of public opinion unavoidable, and as the pharmacist is incidentally benefitted by the enforcement of the law, he must make up his mind to bear the burden of its enforcement.

The funds raised under the present system are inadequate in nearly all the older states, and since it seems that the pharmacist himself must furnish the required funds, the system of re-registration seems the only practical solution of the problem.

Such a step will meet with most bitter opposition on the part of many pharmacists. They will esteem it a great and unnecessary hardship to have to pay a re-registration fee each year, and may, in some cases, esteem it an undue interference with personal liberty.

As shown above, however, the step seems a necessity, since we cannot yet place the charge with the State where it belongs, because the public view the law as one for the protection of a class, and since the proper administration of the law requires larger expenditures.

As to the interference with the liberty of the pharmacist involved, we must consider this also as a part of the price which we must pay for the protection of the pharmacist from unfair competition, and of the public from incompetent pharmacists.

Written for the American Druggist and Pharmaceutical Record.

THE PROFESSIONS OF MEDICINE AND PHARMACY

By HARRY B. MASON, PH.G.,
Chester, Mass.

There is an all pervading idea among the general public that the practitioner of medicine is an allwise being whose knowledge of both medicine and pharmacy is unlimited, and, on the other hand, that the pharmacist is an ignorant vendor of drug sundries who knows, perhaps, what he may have picked up from filling the medical man's prescriptions. They very considerately give him credit for possessing *part* of the physician's great and vast fund, but never for a moment suppose him guilty of knowing anything, no matter how insignificant, that the physician does not.

They exclaim: "It is absurd to suppose that a physician does not know *all* that a pharmacist does!"

What is the origin and cause of these very general ideas that are held concerning pharmacy and medicine?

Before chemistry reached its present high standing as a science the pharmacist was a "druggist," who did little more than buy and sell drugs; he had no right to be considered other than a merchant. But since so much has been done in the field of chemistry during the past few decades, pharmacy has taken great strides forward and sprung from almost oblivion into front ranks as a profession.

Colleges have been organized and each year are growing in number and excellence, where proper training is given the student after he shall have served his four years' apprenticeship in the store. He is there put through a thorough course of study interspersed with practical experiment and turned out a "professional pharmacist." He is a professional man in every respect and capable of being so considered.

State laws have been originated and boards of pharmacy elected to enforce them, compelling pharmacists to be educated for their chosen vocation, and capable of pursuing their calling to the honor of their profession. These have been growing in exactness and severity each year until even recent college graduates find them anything but easy and many fail to pass them.

But after he has been graduated from college and educated and fitted himself as a pharmacist the people think he has but taken part of a medical course—that part which is applicable to pharmacy.

Does the physician endeavor to correct these prevailing ideas, or does he allow the people to consider the pharmacist as possessing but a part of his knowledge? I have yet to find the physician who ever gave the pharmacist his just dues. They are only too willing to build up their own reputations at the expense of the pharmacist.

Let us endeavor to point out a few distinctions between the two sister professions and some of the many duties and requirements of the pharmacist.

The physician diagnoses his patient's case and selects one or more medicines among the list applicable to the result of his diagnosis and prescribes them.

The pharmacist must needs fill the prescription. He must know at a glance whether the articles under consideration in the prescription before him are incompatible or not, whether the chemicals or alkaloids prescribed are completely soluble in the stated solvents, whether any two are therapeutically opposed, and the character and dose of the non-poisonous as well as poisonous ingredients. If incompatibility is liable to occur he must so dispense the articles as to prevent it if possible; if not, to use his judgment, for in some cases incompatibility is desired. Should the chemicals or alkaloids be insoluble only, or partly soluble in the stated amount of solvents prescribed, he must correct it without materially altering the intent of the prescriber, else an unsightly and mayhap a dangerous compound would result. Should an overdose of a poisonous salt or alkaloid be prescribed, he must distinguish it at once, and correct it if necessary, or, better, seek out the prescriber and courteously call his attention to it. He must not dispense a prescription, two constituents of which are directly opposed in their therapeutic action; atropine and pilocarpine must not be dispensed together, for there certainly would be no desired action and harm might result.

These are some of the things a pharmacist should recognize with one careful perusal of every prescription sent to him to be dispensed.

Every chemical, vegetable drug, alkaloid and preparation used and directed by the physician must be of known purity and excellence. The pharmacist must be capable of thoroughly testing every chemical for its impurities as well as its identification, in fact, he must be an analytical chemist. Adulteration is practiced to such an extent at present that he is compelled to make many of his own salts, and this requires considerable knowledge of operative chemistry. He must be able, if necessary, to identify every alkaloid he has in the store by color tests and reactions, for in cases of emergency, when human life is at stake, too much care cannot be taken. Every drug of vegetable origin he must be able to identify through his trained senses of smell and sight; he must know their adulterants so as to distinguish them readily and thus prevent one thing being dispensed when another is called for. His preparations, to insure accuracy, purity, and excellence, must be made by himself mostly, and this requires much practical together with theoreticel knowledge of the drugs and their proper menstruums in order that their valuable constituents may be gotten, to the exclusion of the inert and undesirable ones.

He must have a thorough knowledge of drugs or preparations liable to chemical or fermentative change, and be able to distinguish by tests, sense of smell, taste or otherwise, when such change has occurred, else desired effects are not gotten and harm may result. In fact, every drug, chemical, alkaloid or preparation of any kind under his supervision, must be accurately known by him; their properties, dose, manufacture, origin, solubilities, and peculiarities must be an open book to him.

He is trained and educated for this sort of thing; it is his profession. Does a physician's education and training fit him for this class of work? Is he a professional pharmacist as well as a practitioner of medicine? Our State laws state distinctly that he is not. He must first successfully pass the rigid examinations of the State board before he is allowed to practice. And how many of them are successful unless they have first had many years practical experience in the store, their medical education enabling them to study theory. The number is most decidedly small, so small as to require a powerful lens to make them visible to the naked eye.

There is no law that can prevent a physician from dispensing his own medicines, but since the State laws do not allow him to dispense other than his own, does it speak well for his ability to do so? Ought not this branch of the work to be placed in the hands of the professional pharmacist whose education and training, especially if he be a college man, prepare and fit him for it?

And yet people say: "It is absurd to suppose for an instant that a doctor does not possess all the knowledge a pharmacist has, beside all that a doctor knows." What ignorance! A physician is trained for correct diagnosis of cases and for proper remedies to correct the evils, to perform surgical operations, and many other things of like character, but he is not a pharmacist.

But the idea presents itself: Ought not the physician to precede his medical course with a course in pharmacy? Probably he would be much benefitted thereby; certainly his fund of knowledge would be considerably larger, and since he is *supposed* to know pharmacy, I am not sure but what it is a commendable step. But no one person is expected to know everything, though I have seen physicians who labored under the delusion that they were masters of several professions, when they were incapable of retaining medicine alone. A small part of a pharmacy course would prove of value to the practicing physician, but the remainder he would never call into account any more than a pharmacist would in taking a medical course. What pharmacy is essential for his use as a *physician* is included in his college curriculum.

Pharmacy is a complex calling, its phases are many sided and various. The pharmacist must know considerable theory, a great deal more practice, be possessed of an iron-clad memory, and a knowledge of an unlimited number of little things, which in the aggregate amount to much. Among other things he must know the correct Latin name of each of the fifteen hundred articles in his store, and in addition all their synonyms, some of which glory in the possession of half a dozen. To master these details is a question of practical experience of long standing. Any amount of theory will avail naught. And yet, do you tell me that a physician who has but taken a theoretical medical course, and never one minute of practical experience in the store, has ever been trained in these things and is capable of pursuing the profession of pharmacy?

The pharmacist of to-day goes through a college course of considerable severity, a course as exacting, if not more so, than that of medicine. He is fitted for a pharmacist, but nobody ever thinks of exclaiming: "It is absurd to suppose that having been through a college course he is not fitted to practice medicine as well as pharmacy!"

Of course, there are pharmacists who are incapable of pursuing their profession ably, but there are exceptions to every good rule, and you must expect them with this as with any other. I have known physicians who I would not trust to extract a sliver from my finger.

In many cases the recovery of the patient is at least partly due to the pharmacist, for without his skill the efforts of the physician would avail him nothing.

But does he get due credit as a professional man and a public benefactor? Let us cite an instance.

A wealthy patient in the country suspects he is diabetically inclined, and sends his city physician a sample of his urine for examination. The physician

takes the urine to a professional pharmacist for examination on suspicion of diabetes mellitus, and in the course of a few days gets his report in full. He then prescribes for and advises his patient according to the results of the analysis made by the pharmacist. Who earns the credit, and who does at least part of it justly belong to? Is it just to suppose that the praise is all due to the physician think you? He gets it whether or not it is his, and the pharmacist is not known as the means whereby the physician was enabled to correctly treat his patient.

There is hardly a man in existence who is not susceptible to flattery, and if opportunity presents itself whereby he is made to appear a walking compendium of science, he accepts it, whether by so doing he thrusts somebody else back or not. It is to be regretted that physicians are no exceptions to this rule.

I sincerely hope the day is not far distant when the physician and pharmacist will travel their respective paths in peace and harmony, each assisting the other all in his power, but practicing his own profession, thus enabling each to know as they are, and to stand on their respective merits.

Then, and not until then, will the public recognize in the pharmacist a skillful, experienced, educated professional man who is as essential to mankind as is the physician.

Written for the American Druggist and Pharmaceutical Record.

A PRACTICAL PHARMACIST'S NOTES ON THE NEW PHARMACOPŒIA.

By Frank Edel.

The New Pharmacopœia has now been before the pharmacists of the country long enough for them to become familiar with the changes, additions, and improvements in same, and to form some definite judgment of it.

It was not supposed when it was issued that everybody would be suited; but there can be no doubt that as a body, the profession are pleased with it. It is true that some are disappointed in the work because it did not go as far in the line of standardization of preparations made from vegetable drugs as they would have liked, others (a small body) preferred the 1880 system of parts by weight, and the writer feels safe in asserting that the great majority of working pharmacists of the country were disappointed in not having a system of dosage incorporated therein. In the mind of the writer this was a gross error.

Taken as a whole, the book is a great improvement over the 1880 edition, and there can be no question that it has met with the hearty approval of a great majority of pharmacists in the country. The directions given (very explicit, and often very simple) for testing the purity of chemicals can have but one effect, that of raising the standard of chemicals sold, although it is true beyond question, that the great majority of the profession do nothing in this line, and even when they do anything at all, do so little as to make it worth nothing to them To illustrate: Some time ago, the writer had a sample of glycerin C. P., from a well known manufacturer, handed him to test.

The gentleman who handed it said it was heavy with sugar or glucose, that it turned very brown when mixed with concentrated sulphuric acid, and that the Pharmacopœia said that it indicated these impurities Upon being questioned, he said he did not especially test for either of them except as above.

A careful examination of the sample showed neither glucose, sugar nor gum. This is merely given to show how conclusions can be formed very hastily and thus be very misleading. If the pharmacist will use the test given in the Pharmacopœia he will soon become so familiar with the detail work of pharmaceutical testing that he, unknown to himself it may be, will have laid the foundation work for a knowledge of chemical principles and reactions which cannot but be of great advantage to him.

But it was not the writer's purpose to enter into a discussion of any particular part of the Pharmacopœia, but rather to notice the changes, call attention to what seem to him as improvements or otherwise, and not to dwell at any length on any particular subject.

The change from cotton to precipitated phosphate of lime in making medicated waters was opportune; few pharmacists were pleased with cotton, and phosphate of lime is greatly superior to it from any standpoint, and also superior to the carbonate of magnesium used in the 1870 formulas. But distillation is vastly to be preferred to either.

In leaving abstracts out the committee did a wise thing. In their endeavor at uniformity the committee of 1880 incorporated abstracts. But they have met with little use, and while they are more uniform than the solid extracts they are too bulky and have every other disadvantage of the extract. The Pharmacopœia recognizes but the 10 per cent. hydrobromic acid. Would it not have been well to have incorporated the 34 per cent. also? This acid has been pushed for years, has considerable sale, and the writer believes it should have had a place among the U. S. P. acid.

Stearic acid is a new official incorporated simply for its use in making glycerin suppositories. Sulphurous acid has been changed back to the 1870 standard of straight 6.5 per cent. The 1880 acid is too dilute, containing but 3.5 per cent. This has been frequently pointed out by Dr. Squibb, who in his price list has refused to list a U. S. P. 1880 acid, but has continued to list the acid of 1870.

The U. S. P. ether of 1890, is the ether fortior of 1880. This is as it should be, for the best is none too good for the Pharmacopœia

Hydrogen peroxide has been made official, and a formula for its preparation given. The use of this preparation has grown enormously during the last few years. And there are some very competent and skillful pharmacists and chemists who claim that it is not stable, but rapidly loses strength. By the formula now official this is no objection, as it can be easily prepared by the pharmacist at short intervals.

The change from parts by weight to liquids by measure and solids by weight was made in accordance with the wishes of a large majority of the working pharmacists.

The formula for cerate of cantharides has been modified by the addition of turpentine. This was done because of the solvent action of turpentine on cantharidin.

It does not appear that styptic collodin is an efficient medicinal; it certainly is not a good pharmaceutical.

Since it has been fully demonstrated that water is a solvent for the active principles of ergot, it may be questioned whether the increase in the alcoholic strength of menstruum used in the formula for fluid extract is wise or not. Acetic acid is, to say the least, of questionable value in this formula.

The alcoholic strength of fluid extract grindelia has been increased. This preparation is now largely used in rhus poisoning, and there can be no question that the alkaline preparation as made by at least two prominent pharmaceutical houses is more efficacious in such cases than the resinous fluid extract made by the U. S. P. formula.

The directions for making fluid extract of triticum repens are the same as in 1880 Pharmacopœia. It is an impossibility under ordinary conditions to exhaust this drug by percolation with hot water without fermentation of the saccharine matter. The drug is, however, easily exhausted by boiling, and by this means a much superior extract can be made without any danger from the source.

The formula for standardized extract of nux vomica is welcomed by all, as it offers at last a sensible means of making a standardized tincture of nux vomica.

The formula for glycerite of hydrastis is an excellent one. There can be no question that the non-alcoholic preparations of hydrastis are more largely sold than others, and the incorporation of the formula into the Pharmacopœia can but bring about greater uniformity in preparations of the kind. It also gives the pharmacist a ready means of preparing an elegant preparation of this kind.

The standardization of the preparations of opium is a step which has long been regarded as a necessity, and the increase of morphine strength required in powdered opium is also wise. Any person who has taken occasion to examine the powdered opium from reputable houses cannot have failed to note that very rarely, if ever, does it run as low as 12 per cent. The method of assay has been changed to conform to the views of Squibb and others

Green iodide of mercury (proto iodide), made by the process of 1880 and before, has not been a satisfactory chemical, while by the 1890 formula it is easy to prepare a proto-iodide of mercury that is free from mercuric salts.

The formula for liquor potassæ arsenitis has been changed by doubling the amount of bicarbonate potassium formerly ordered. This conforms with the idea of Prof. Oldberg, and the arsenical solution is much more rapidly completed than by the old formula.

Liquor Ferri et Ammoniæ Acetatis is the new title for Basham's mixture, and glycerin is ordered in place of the syrup of the old formula

It is to be regretted that the recommendations of Prof. Patch in regard to liquor magnesia citratis were not followed. The product of the formula of 1880 was unstable, and it is very questionable whether the 90 formula will keep as well.

The Pharmacopœia of 1880 allowed the use of heat up to 160° F., in making oleate of mercury. The new Pharmacopœia orders it made cold. This may and no doubt does improve its keeping qualities some, yet still it keeps poorly It has always appeared to the writer that the 28 per cent. oleate should be the U. S. P. preparation instead of a solution of oxide in excess of oleic acid, as now ordered. The 28 per cent. is just as easily made and keeps much better.

The Pharmacopœia, in accepting 1 to 3,000 as the digestive strength of pepsin,

is only keeping pace with the advancement in pepsin manufacture.

The formula for spirit of nitrous ether has been changed to conform to the investigations of Prof. Patch.* Since the great majority of pharmacists use the concentrated nitrous ether of the market, they are chiefly interested in the mode of assay given.

When the Committee of 1880 changed the oil of nutmegs in aromatic spirit of ammonia, and ordered in its place oil of pimento, they made a mistake which the Committee of 1890 recognized and corrected by changing back again to oil of nutmegs. The spiritus odoratus of the last Pharmacopœia and also of the new does not seem to have given satisfaction, but it is little used, since every pharmacist has a special formula of his own.

The spirit of phosphorus will be found rather difficult of preparation. If the phosphorus is first dissolved in a small quantity of chloroform, and the proper amount of alcohol added, solution can easily be effected.

The formula for syrup of hydriodic acid has been changed and now conforms with the N. F. formula.

The formula for syrup of lactophosphate of lime has been changed to conform to the idea and formula suggested by Rother some years ago. Both of the above preparations are more easily made by the present formula than by those formerly official.

The citric acid of the compound syrup of the hypophosphites has been replaced by hypophosphorus acid.

In compound syrup of hypophosphites, with iron, advantage is taken of the solubility of lactate of iron in citrate of potassium solution. As hypophosphite of iron is also soluble in citrate of potassium solution, would it not be preferable to use this in place of the lactate?

Acetic acid has been added to the formula for syrup of ipecac. The formula for compound syrup of sarsaparilla has been greatly changed, whether wisely or not time will tell.

The formula for making compound syrup of squills is also modified.

The menstrum used in making tincture of aconite root has been changed, being made less strongly alcoholic so as to make a preparation insoluble with water without precipitation.

Tincture of arnica root is continued, although for what purpose is not known.

Tincture of calendula is still ordered made from the flowering herb instead of the flowers. Since all the reputation the preparation has was made by a tincture of the flowers it seems strange that the committee should order the flavoring herb instead of the flower itself.

Tincture of strophanthus is made official.

The formula for cold cream has been modified and borax added to it.

The changes called to mind above are the most important, and, taken as a whole, the writer would offer it as his individual opinion that the pharmacists of America have just cause to be proud of the United States Pharmacopœia of 1890.

DEPILATORY SOAP.

[JACOB MELLINGER—*Corps Gras Industrie.*]

	Parts.
Glycerin	453
Tallow	907
Cocoanut oil	907
Castor oil	1,844
Soda lye 33 per cent	1,814
Starch	113
Sodium sulphate	907

* See AMERICAN DRUGGIST for March 1893 page 17.

Pharmaceutical Progress.

Tetano-antitoxine is an animal extract designed to counterbalance the poisons of tetanus; hence its name. It is brought out by Fizzoni and Caltani.

Juglandine is a resinous extractive from the secondary cortex of the root of *Juglans cinerœa*, and is employed as a laxative, in doses of 2 to 3 grains, and as a strong purgative in doses of 15 to 30 grains.

Koussotoxine is the principle isolated from kousso, having the composition $C_{26}H_{34}O_{10}$. It is a yellow powder, melting at 80° C. It is easy soluble in alcohol, ether, and chloroform, and insoluble in water. It closely resembles the koussine of Merck ($C_{23}H_{30}O_8$), but it reduces Fehling's solution, which koussine does not.

Embelic acid, an acid obtained from the roots of *Embelia ribes*, one of the East Indian *Myrtaceœ*, is being put forward as an ammonium salt as a remedy for tape worms. The composition of the salt is $C_9H_{13}O_8.NH_4$. Being very insoluble, it is best administered in suspension in syrup or honey, and should be taken in doses of 3 to 6 grains, after a dose of castor oil. It is a tænifuge and not a purgative.

Codeine Alkaloid in the Salts.—The *Rundschau fur Pharmacie* gives the following note on Salts of Codeine:

Phosphate of codeine contains 76 per cent of codeine; it is soluble in 4 parts of water, and is the best for hypodermic injections. Hydrochlorate contains 8 per cent. of base, and is soluble in 20 parts of cold water and one part of hot water. The sulphate contains 76 per cent., and dissolves in 35 to 40 parts of cold water.

New Reagent for Glucose.—M. J. Gaube proposes the following, which he declares will show the presence of infinitessinal quantities of glucose: Potassium ferricyanide, K_3FeCy_6, chemically pure, 1 part, soda lye (soap makers' lye) 20 parts; distilled water, 2,000 parts. Mix and dissolve. Fifteen deci-milligrams (0.00015) of glucose exactly decolorize 1 gm. of this solution.—*Nat. Drug.*

Reagent for the Nitrites.—O. Bujwid, in the *Chemiker Zeitung*, states that the following reagent is very delicate, demonstrating the presence of the merest traces of the nitrites in water analysis. Add a few drops of chemically pure hydrochloric acid to 10 ccm. of the water, warm to 70° or 80° C, and add a few drops of indol solution (0.1—0.2 indol in very dilute alcohol) to the mixture. If trace of the nitrites be present, a fine red color at once develops, which becomes stronger for several minutes.—*Nat. Drug.*

The Alkaloids of Corydalis Cava.—The root of the corydalis contains several bases. Treated with alcohol it yields:

Corydaline in the form of large white prisms, fairly soluble in alcohol and ether. Another feeble base accompanies the foregoing, and crystalizes in white needles which melt and decompose at 218°. This substance, soluble with difficulty in ether and ether and alcohol, dissolves in strong acetic and hydrochloric acid, not in alkalies.

Bulbocapnine, according to Freund and Josephy is a strong base, melting at 199° and soluble in an excess of alkali. It is a constitutent of the alcoholic extract. The hydrochlorate is sparingly soluble in cold water.

Corydine is amorphous, insoluble in water, very soluble in alcohol and ether. It is derived from the mother-liquids which yield the bulbocapnine. The neutral uncrystallizable hydrochlorate is soluble in water. Soda precipitates it as a white mass insoluble in an excess of reagent. It is a violent tetanic poison.

Emulsin is the name of a parafin oil which has been placed on the market in France, which has been oxidized under pressure. It is (*Jour. d. Pharm. v. Els. Loth.*, 1894, 128) a neutral odorless liquid, forming a permanent milky mixture with water, and is recommended for the preparation of emulsions The editor of *Centralhalle* points out that this description fits vasogen [see A. D. & P. R. for 1894, p. 316], while the introducer shows but a scanty knowledge of chemistry, as the name emulsin has already been applied to the ferment of the almond.

Antiphtisine or Sozalbumose Figures Chiefly Among New Remedies This Month.—According to the *Pharm. Centralh.* it is prepared as follows: A ½ per cent. solution of cresol is added to a culture of bacillus tuberculosis and filtered. After 24 hours the culture is perfectly sterile. Excess of iodide of bismuth and sodium solution is now added in order to precipitate the toxalbumens. The sozalbumose remains in solution. If this be now warmed with a little caustic soda solution and filtered all the bismuth is removed. By the addition of five volumes of alcohol the antiphtisine is precipitated. It is then redissolved and preserved in water containing .2 per cent. of cresol.—*British and Colonial Druggist.*

Spasmotoxine, or sphacelotoxine, is a substance extracted from ergot, whose chief action is to produce muscular contraction of the small arteries, and an action on the uterus similar to that of ergot itself. It has been isolated by Dr. Jacoby, of Strasburg. Its preparation is based upon its solubility in ether and its insolubility in petroleum ether. The ergot is first extracted with ether, and the compound precipitated by means of petroleum ether and then purified. It forms an amorphous yellow powder, insoluble in water or dilute acids, but very soluble in alcohol, acetic ether and benzol. It forms salts with alkalies, and is obtained in the crystalline state by means of benzol. Its formula appears to be $C_{30}H_{31}O_9$. The ordinary dose is from ½ to 1 grain.

Chroatol.—A new remedy in skin diseases. Chroatol presents itself in the shape of crystals of greenish-yellow appearance, having a pronounced aromatic odor, insoluble in water, slightly soluble in ether and chloroform, but more so in alcohol and glycerin. Experiments instituted on guinea pigs show that it can be taken up to 75 cgm. per kilogramme of weight (6 grains to the pound) without producing any poisonous effects. In clinical medicine, applied to the skin suspended in collodion in a case of refractory psoriasis, upon which all of the most powerful remedies hitherto known (pyrogallic acid, chrysophanic acid) had failed, it produced rapid amelioration, and finally a cure. It has been used successfully in a certain number of cases of alopecia and porrigo decalvans. In a pomade and in powder (diluted with inert matter 10.1) it has proven successful in the treatment of rebellious varicose ulcers. A curious fact in regard to chroatol thus administered is, that many patients upon whom it had been used complained of a bitter taste in the mouth and throat. This is due, no doubt, to the elimination of the remedy by the respiratory viæ.—*The National Druggist.*

Extracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.*

(*Continued from page 340.*)

Preparations for Cleansing Clothing.

OX-GALLS CLEANSING SOAP.

I.

	Parts by weight.
Extract of soap bark	5
Borax, powdered	5
Fresh ox-gall	20
Common soap in coarse powder	75

Triturate together the borax, extract of soap bark, and ox-gall, dissolving as much of the borax as possible. Then add the soap, beat the whole to a uniform consistence, and cut into cakes of the desired size.

II.

	Parts by weight.
Borax, powdered	10
Common soap	70
Green soap (soft)	20

Mix to a uniform mass, using a gentle heat if necessary.

CLEANSING PENCILS.

Form little rolls from either of the above soaps 2 c.m. (half an inch) thick and 5 c.m. (2½ inches) long, and cover with tin foil.

CLEANSING SOLUTION.

Fleckwässer.

I.

	Parts.	
Spirit of ammonia	50	5 fl. ozs
Rectified turpentine	50	5 fl. ozs
Ether	50	5 fl. ozs
Oil of lavender	5	½ fl. ozs
Alcohol (90 per cent)	845	84½ fl. ozs

Mix and filter.

II.

	Parts.	
Spirit of ammonia	20	2 fl. ozs
Ether	50	5 fl. ozs
Benzine	150	15 fl. ozs
Oil of lavender	5	½ fl. ozs
Tincture of soap bark	225	22½ fl. ozs
Alcohol (90 per cent)	500	50 fl. ozs

Mix and filter.

III.

	Parts.	
Rectified turpentine	10	1 fl. oz
Benzine	10	1 fl. oz
Ammonia water	10	1 fl. oz
Alcohol (90 per cent)	70	7 fl. ozs

IV.

	Parts.
Benzine	999.0
Oil of turpentine	0.5
Oil of myrbane	0.5

Mix.—The so called "Brönnersche Fleckwässer" is particularly suited for cleansing gloves.

Before applying any of the cleansers recommended to colored goods an experiment should be made either with a sample of the goods or on some portion which will not be seen, to determine whether directions given for treating the spot will not affect the color.

[The following directions are extracts from a table compiled by Ad. Vamacka and published entire in Dielench's manual.]

THE SPOT IS OF UNKNOWN ORIGIN.

White goods: Dissolve some soap in lukewarm water and add two dessert spoonfuls of cleansing liquid (as above), and dampen the spot with a sponge soaked in this solution; finally wash out in clear water.

Colored Woolens: Dissolve a cleansing pencil (as above) in a bottle of solution and wash out the spot in the liquid, then rinse in clear water and dry in the air.

Silk, satin and similar delicate fabrics: Add to above solution the yolks of two eggs, and spread this on the spot. Then wash in lukewarm water, rinse in cold water and dry by a gentle heat. To press out use an iron that is warm only, not hot.

THE SPOT IS OF DUST.

White goods: Beat and brush.

Colored wool, silk, satin, etc.: Old spots that are dried in should be painted first with yolk of egg, then with cleansing solution and allowed to dry. Scratch this off and wipe with a wet linen rag.

MILK, SOUP, OR SMALL GREASE SPOTS GENERALLY.

White goods: Wash with the warm solution of a "cleansing pencil" in water.

Colored cotton or woolen goods: Dampen with cleansing solution; remove the excess of the solution by means of blotting paper, and wash with a solution of a "cleansing pencil."

Silk, satin, etc.: Dampen by means of a sponge soaked in cleansing fluid No. 1, removing any excess by means of blotting paper.

BUTTER, GREASE, OIL, OIL PAINTS, VARNISH, ETC.

White or colored woolens or cotton goods: Moisten several times with cleansing fluid No. 1, lay a piece of blotting paper over the spot and press this with a hot iron. Then wash the whole of the fabric in hot soap suds.

Silk, satin, and delicate fabrics: Rub up some "white bole" thin dough with cleansing solution No. II., and spread over the spot. When thoroughly dry brush off and wipe with dry bread crumbs.

When the spots are old: First moisten with chloroform and then proceed as above.

THIS SPOT IS FROM STAINED WAX, ETC.

First remove as much as possible with a knife, then lay a damp towel under the spot and put several thicknesses of blotting paper over it and press out with a hot iron. If any stain remain after this, treat as directed under butter, grease, etc.

RESIN, TAR, AXLE GREASE, ETC.

White goods: Wet with good oil of turpentine, wring out, cover with blotting paper and go over with a hot iron. Then wash in warm soap suds.

Colored cotton or woolen goods: Moisten the spot, apply butter, soap thoroughly, allow to stand for a few minutes and then wash with oil of turpentine and hot water alternately. If this does not help, spread over the spot the yolk of an egg previously mixed with turpentine, cover with blotting paper and press with a hot iron. Then scratch off the residue and wash thoroughly. As a final resort wash out in water slightly acidulated with hydrochloric acid.

Silk, satin, etc.: Drench with chloroform, and when this has evaporated apply "white bole," cover with blotting paper, and press with hot iron. If this does not help, mix some yolk of egg with chloroform and proceed as above, removing the residue by wiping off with bread crumbs.

VINEGAR, ACID WINES, FRUIT, ETC.

White goods: Wash out with clear water to which a little "cleansing solution" No. II. has been added.

Colored goods whether of cotton, wool, or silk: Moisten with "cleansing solution," allow to evaporate, and then rinse in clear water.

ACIDS.

Fresh spots may be removed by putting on a drop of "cleansing solution;" old spots cannot be remedied.

COLORED FRUIT STAINS FROM PEACHES, RED WINE, CHERRIES, STRAWBERRIES, ETC.

White goods: Dip in Javelle water and immediately that the stain has disappeared wash thoroughly in clear water.

Colored cotton or woolen goods: Wash with hot soap suds, to which a smaller or larger quantity of Javelle water has been added (as the fabric is more or less delicate), rinse in water to which a little cleansing solution has been added; finally wash in a large quantity of clear water.

Silk, satin, etc.: Follow directions as above, save to use very dilute solutions.

GRASS STAINS.

White goods: Wash out with boiling water.

Colored goods, whether of cotton, wool, or silk: Moisten the spot with a very dilute solution of chloride, and then wash thoroughly in a plentiful supply of clear water.

STAINS FROM TANNIN, GREEN, NUTS, ETC.

Treat with very dilute Javelle water.

COFFEE OR CHOCOLATE STAINS.

Cover the spot with yolk of egg diluted with "cleansing solution," wash out in warm water and iron while still moist on the wrong side of the cloth.

ANILINE INK STAINS.

White goods: Wash with alcohol to which a little acetic acid has been added, and then bleach with Javelle water.

Colored goods, whether cotton, wool or silk: If the color admits of it follow the directions for white goods. If the dye is too delicate for this, wash out with strong alcohol alone, as nothing else will prove of benefit.

Toilet Applications.

COCOA-BUTTER MILK.

Powdered borax	℥ iiss
Powdered Castile soap	℥ iv
Powdered cocoa butter	℥ iss
Cocoanut oil	℥ iv
Water	℥ ij

Rub together in a warm mortar for ten minutes, then dilute very gradually with—

Rose water, at 40° C	℥ xxvj

Shake the mixture well and perfume with—

Oil of bergamot	gtt. xx
Oil of neroli	gtt. v
Oil of orris	gtt. j
Vanilla sugar	℥ iiss

Previously rubbed together.

COCOA MILK.

Powdered borax	℥ iiss
Powdered Castile soap	℥ v
Cocoanut oil	℥ ij ℥ ij
Water	℥ ij
Rose-water 40° C	℥ xxvj
Oil of bergamot	gtt. x
Oil of neroli	gtt. v
Oil of wintergreen	gtt. ij
Oil of ylang-ylang	gtt. j
Oil of bitter almonds	gtt. j

Prepare in the same manner as cocoa-butter milk.

LANOLIN MILK.

Powdered borax	℥ iiss
Powdered Castile soap	℥ v
Water	℥ iiss
Cocoanut oil	℥ j
Lanolin	℥ iiss
Rose-water at 40° C	℥ xxv
Oil of bergamot	gtt. x
Oil of neroli	gtt. x
Otto of rose	gtt. v
Oil of wintergreen	gtt. j
Oil of orris	gtt. j

Prepare in the same manner as cocoa-butter milk

* Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL MANUAL.

Notes on Practical Pharmacy.*

By JOSEPH W. ENGLAND, PH.G.

"C. C." COUGH MIXTURE.

Under this name a cough mixture is very largely used in the phthisical wards of the Philadelphia Hospital. It has, in each fluid drachm, the following: Co leine sulphate, one-eighth grain; diluted hydrocyanic acid, two minims; spirit of chloroform and mucilage of acacia, each fifteen minims, and syrup of wild cherry, a sufficient quantity to make one fluid drachm. Dose, one fluid drachm.

DISTILLED EXTRACT OF WITCH HAZEL.

The writer has been informed, on good authority, that the percentage of alcohol in commercial distilled extract of witch hazel is not necessarily an index of its value, for the reason that some dealers buy the cheaper aqueous distillate from the distiller and add alcohol. The only proper product is had by distilling the fresh twigs with a mixture of alcohol and water, whereby a greater quantity of volatile oil is brought into solution than by distillation with water alone.

SYRUP OF WILD CHERRY.

In making this syrup, more especially in the summer season, when fermentation takes place readily, it is advisable to add some of the sugar to the percolate as soon as possible to prevent change. The pharmacopœial formula of 1870 contained no glycerin, that of 1880 ordered five per cent., and that of 1890 fifteen per cent. by volume. This last increase seems excessive. The greater the percentage of glycerin the greater the amount of tannin extracted, up to a certain point. It is a question whether this increased astringency in the syrup is therapeutically desirable.

BLAUD'S PILLS (IMPROVED).

The usual formula for this much-used, unofficial ferruginous preparation of ferrous sulphate, potassium carbonate, tragacanth and glycerin, can be much simplified and made to yield a more permanent product by using the following formula: Potassium carbonate, one-third grain; potassium sulphate, two grains, and mass of iron carbonate, three grains in each pill. Little or no excipient is required. The pills flatten somewhat on keeping, and are best dispensed in gelatin capsules. They are small in size and do not become hard and reddish-brown on fracture as do those made by the old formula.

OINTMENT OF AMMONIATED MERCURY.

This ointment is most difficult to make by the official process and secure entire freedom from "grit." The best method is, for example, to finely powder in a mortar 48 grains of the mercury compound and beat it into a smooth paste with 12 grains of glycerin, and make the official ointment from this as wanted, by admixing one drachm with seven drachms of cerate. In this connection criticism may be made against the use of alcohol, as in the 1880 Revision, or olive oil, as in the 1890 Revision, to render veratrine smooth in making veratrine ointment. A small quantity of glycerin is better. Glycerin is also of superior utility in softening extract of belladonna prior to making it into ointment; the Pharmacopœia specifies diluted alcohol.

MUCILAGE OF SASSAFRAS PITH

This mucilage is best made by beating the pith, in a wedgewood or porcelain mortar, with a small quantity of *sterilized* water until it gets pasty, expressing through cheese-cloth, returning residue to mortar, adding more of the water and continuing as before. In this way, in a short time, a dense and syrup-like mucilage may be had, very different in physical appearance from the watery product gotten by following the official directions of simple maceration in *water* for three hours and straining.

As this preparation is used as an emollient in inflammatory conditions of the eye-ball and mucous membranes, it is obvious that the greater the percentage of mucilage in solution, the more soothing it will be. In these days of asepsis, the use of *water* in making the official mucilage is an unpardonable sin in the eyes of oculists. Sterilized water, *i. e.*, water or distilled water boiled and cooled, only should be employed. Three hours' time in making the preparation is far too long, when it can be better done in a few minutes.

HOPE'S CAMPHOR MIXTURE.

This old preparation has been gradually increasing in use, and is recognized by the National Formulary under the name of Mistura Camphora Acida, which authority follows the formula of Ellis (Griffith's Formulary, 1866, p. 160) in using *nitric* acid. The original formula of Hope, however, specified *nitrous* acid. The formula we have used for years is: Fuming nitrous acid, 2 fluid drachms; tincture of opium, 80 minims, and camphor water, 1 pint. Parrish's Pharmacy (1884) refers to the mixture as follows:

> This formula was originally made public after twenty-six years' experience of its use in dysentery, by Thos. Hope, Esq., surgeon, Chatam, in the Edinburgh Medical and Surgical Journal, January, 1824. Dr Ho e was in the habit of directing *nitrous* acid, *not* nitric, which he says he has "not found to produce any good effect." I have been careful to follow his formula literally, and have for the purpose prepared nitrous acid by the process given on p. 100; though nitrous acid passes into nitric acid by contact with water, this reaction does *not* occur in the presence of an excess of nitric acid. Few remedies have a more general and widespread reputation than this; it is now frequently prescribed, more than eighty years after its virtues were originally discovered.

The nitrous acid used is known in commerce as fuming nitrous acid or fuming nitric acid. It is really nitric acid, holding in solution nitrous acid fumes, which latter may be wholly removed by boiling, or largely by simple and continued exposure to air; so that the commercial product varies considerably in strength of absolute nitrous acid.

Remington's Pharmacy (1885), p. 1027, specifies nitrous acid in the formula for this mixture, as does also the National Dispensatory of 1884 (p. 75) and 1894 (p. 76). Hope's Camphor Mixture is still largely used, at least with us, in summer dysenteries, and if Mr. Hope's contention as to the necessity of using only *nitrous* acid, *never* nitric is correct, then the National Formulary decidedly errs in following the formula of Ellis and specifying the latter.

The objection sometimes raised as to the difficulty of securing good fuming nitrous acid can be met. The pharmacist can easily make his own nitrous acid, extemporaneously, from sodium nitrite and nitric acid, using quantities sufficient to yield the amount of acid in the formula, which is small. Messrs. Rosengarten & Sons state that sodium nitrite of the new official strength (97.6 per cent.) is readily obtainable.

MEDICATED WATERS.

In the making of medicated waters—save those prepared by distillation or direct solution—the new Pharmacopœia directs precipitated calcium phosphate as the distributing medium in about the same proportion as that directed for magnesium carbonate in the 1870 issue. As was pointed out by the writer ten years ago (A. J. P., 1884, p. 65), in advocating the use of precipitated calcium phosphate for this purpose, it is essential in order to properly distribute the oil, that the lime compound be used in *double* the quantity of magnesium carbonate usually employed, on account of its much less bulk. The official quantity of the lime compound should be 8 gm. to the 1,000 cc. of the medicated water, and not 4 gm. as directed.

It is best to add, as the Pharmacopœia directs, *all* the water to the admixed lime compound and oil before filtration. The practice of some pharmacists adding only a *part* of the water, throwing on a filter and then adding further water from time to time, to the contents of the filter until the required amount has filtered through, cannot result in as strong a solution as if the oil had been brought in intimate contact with all the water at once.

There is one detail whereby the official process can be greatly improved, and that is by using in place of the distilled water *hot boiled* water, *i.e.*, water boiled and cooled to a point just short of boiling. In following this practice, the writer adds the water to the admixed lime compound and oil, places it in a proper vessel, covers tightly and filters after it has stood for some hours, preferably over night.

The use of hot, boiled water has a number of very decided advantages. These are a maximum solution of the oil and an increased pregnancy of the water. Boiled water is far more germ proof than the usual distilled water of commerce, which is believed to be, in some cases at least, simply condensed steam-waste.

Criticism may be made against the use of nearly boiling water for making aromatic waters, on the ground of loss of volatile oil, but practical experience will show that this loss is more apparent than real, that the amount of volatile oil lost by volatilization is insignificant in comparison with the greatly increased amount brought into solution.

* Read before the Pennsylvania Pharmaceutical Association.

The Preparation of Phospho-Glycerate of Calcium.*

Phospho glyceric acid, which was discovered by Pelouze in 1840, by acting on glycerine with anhydrous or glacial phosphoric acid, was also obtained about the same time by Gobley by decomposing the lecithine of eggs by acids. Since, Lehman has proved its presence in diseased nervous matter, and more recently Thudichum and Kingzett prepared it by boiling cephaline ($C_{42}H_{79}N\ PhO_{13}$) with baryta water.

But, however interesting these methods of preparing it may be from the physiological and purely chemical standpoints, they are of no value commercially now that the phospho-glycerates may be called upon to perform an important part in modern therapeutics.

Having been interested for a long time in the question of phosphated milk, which is furnished by cows undergoing superphosphated feeding, and finding in the course of our analytical work on the subject that this milk contained but little more calcium phosphate than the ordinary, we determined to try the glycerophosphates and consequently to study the mode of preparation.

* Translated for the A.D. & P. R. from a paper by L. Portes and G. Primier in the *Repertoire de Pharmacie.*

The first attempts, following the method of Pelouze, although it demonstrated the difficulties of obtaining the calcium salt on a commercial scale, as the cost would be about 200 fr. per kilo, furnished sufficient to institute a series of experiments which were very satisfactory in results, and having foreseen, from these, that phospho-glycerate of calcium was the only therapeutical agent which could replace the phosphorous wasted in the system, and after many trials in the hospitals of Paris—trials which have since been confirmed by physicians in other parts of the world,—we determined to find a more expeditious and less costly method of preparation. This process, which is as follows, yields a pure article at a moderate cost.

Take 3 kilos of phospheric acid, 60 per cent., 3 kilos 600 gms. of glycerine, sp. gr. 1.24, mix together and keep at a temperature of 100 to 110° C. for six days, agitating three or four times daily. It commences to color and emit fumes on the second day; the fifth day it will have turned brown and ceased to fume; on the seventh day it is allowed to cool, and is then viscous and transparent. After cooling the free acid is neutralized by a mixture of 500 gms. calcium carbonate in 2 kilos of water, and then allowed to settle for two or three hours, when more of the chalk mixture is added and the process repeated till all the acid is saturated, which generally takes about two days. The mixture is then filtered and the filtrate exactly neutralized with milk of lime, filtered again and then precipitated by means of 90° alcohol.

The precipitate which forms settles very rapidly; after about an hour the supernatant fluid is decanted, the precipitate is washed and drained. It is then redissolved in cold water, filtered and evaporated at a low temperature.

The salt thus obtained is a white, crystalline powder, soluble in 15 parts cold water, almost insoluble in boiling water, insoluble in alcohol, and giving with ammonium molybdate only a slight phosphoric acid reaction; calcined and dissolved in nitric acid, it produced on the contrary an abundant characteristic precipitate.

After drying at 110° C. analysis of three samples taken from lots prepared at different times gave the following figures:

	No. 1.	No. 2.	No. 3.
Lime	23.18	21.29	23.50
Phosphoric acid	27.86	28.01	28.83

The formula, $C_3H_7Ca\ Ph\ O_9$, established by Pelouse for a salt dried 170°, would require 26 66% of lime and 33 80% of phosphoric acid. The formula, $C_3H_7Ca\ Ph\ O_8$, requires 22.76% of lime and 28.86% of phosphoric acid, figures closely approximating those found by us. Phospho-glycerate of calcium obtained by our process, and such as will be utilized in commerce, will have the formula $C_3H_7Ca\ Ph\ O_9\ 2H_2O$, or $C_6H_6O_4\ (Ph\ O_5HO_2CaO) + 2H_2O_2$, following which the constitutional form would be:

$$C_6H_2(H_2O_2)(H_2O_2)PhO_5HO_2CaO) + 2H_2O_2,$$

or

A dicalcic phosphorine, with 2 molecules of water, or

$$Ph\ O \begin{cases} \begin{cases} O \\ O \end{cases} > Ca \\ \\ OC_3H_5 \begin{cases} OH \\ OH \end{cases} \end{cases} + 2\ H_2O$$

that is to say, phosphoric acid in which 2 atoms of H of the acid hydroxyl are replaced by one of calcium, and the other acid H is replaced by the glyceric radical:

$$C_3H_5 \begin{cases} OH \\ OH \end{cases}$$

and two molecules of water.

Pharmaceutical Notes.*

BY CLEMENT B. LOWE.

TEREBENUM OR TEREBENE.

This has come into somewhat extensive use as a remedy for chronic bronchitis, and it is frequently an ingredient of cough mixtures, or is prescribed by itself.

On account of its slight solubility in water, and its somewhat unpleasant taste, it is best given in an emulsion.

The emulsion should be made by the addition of one drachm of powdered gum arabic for each fluid drachm of terebene.

The primary emulsion, consisting of gum and water, should first be carefully prepared and then the terebene should be slowly and carefully added.

The emulsion will be found quite a difficult one to make, the terebene being easily thrown out of solution.

MUSTARD PLASTER.

The mustard plaster is one of the most important remedies kept in our pharmacies, and yet as far as I know none of the manufacturers have included in their directions that of wetting the plasters before using with only *tepid* water.

The acrid or volatile oils of mustard do not pre-exist as such in the seed, but are produced by the splitting up of the glucosides sinalbin or sinnigrin, by the action upon them in the presence of moisture of the ferment called myrosin.

It is a fact that should be better known that myrosin is coagulated by water of a temperature of 140° F., and rendered incapable of action.

I have found that many people are under the impression that the plaster will be made the more active by dipping it into hot water, but the reverse is the case.

SYRUP OF ACACIA.

It seems strange that the Pharmacopœia should have continued unchanged the formula for syrup of acacia.

In the Pharmacopœia of 1870 the syrup was made directly from the gum, and we had a fairly stable preparation.

In the last two Pharmacopœias it is ordered to be prepared from the mucilage, which spoils quickly, and the syrup thus made would ferment in a few hours, unless the mucilage was freshly prepared.

The formula of mucilage of acacia can be improved upon by the use of chloroform water of the strength given in the British Pharmacopœia.

If the chloroform is objectionable from a therapeutical standpoint, a few minutes' exposure to heat will thoroughly dissipate it,

The most convenient way of dissolving the gum is by means of a dialyser.

ADULTERATION OF BELLADONNA ROOT.

This last winter, on examining some belladonna root, I was surprised to find present a number of large pieces of poke root.

As the former root is indigenous to Europe and the latter to the United States, and as the structure of them is entirely different, it could hardly have been an accidental adulteration.

The cork layer of the belladonna is of a very light brown gray color, while that of the poke root is of a yellowish brown gray and marked by very characteristic transversely elongated corky warts of a lighter color.

The transverse section of the former shows a fine black cambium line, and the woodwedges, when present, are of a light yellow color, radially arranged; in the poke the wood tissue is whitish, and shows a decidedly concentric arrangement.

CAMPHOR.

I have pleasure in calling your attention to an excellent article of camphor, made at the Sumitomo Refinery, Kobe, Japan, and imported by Smith, Kline & French Company.

It comes in boxes very neatly made of wood, pasteboard lined, containing one pound net by actual weight.

The style of package prevents evaporation, and being divided into ounce cakes there is no loss in retailing.

It is less translucent and crystalline than ordinary refined camphor, and is probably made by submitting powdered camphor to powerful pressure.

One part is perfectly soluble in 0.7 parts of alcohol, and sublimes without leaving any residue.

It seems probable that in many industries Japan is going to be an active competitor, not only with European nations, but also with our own.

FLUID EXTRACT TRITICUM REPENS.

The question is asked in query 8, "What is the cause of the active effervescence which takes place when fluid extract triticum repens is added to a carbonate?"

If active effervescence occurs, I should think it due to fermentation having taken place.

The fluid extract is made by first percolating with boiling water, afterward evaporating and adding 25 per cent. of alcohol.

As the medicinal constituents consist of three sugars, two of them directly fermentable, if too much time be taken in percolating and evaporating, there is apt to be some fermentation before the alcohol is added. [See note on this preparation on page 3 by Galen Jr.—ED.]

*Read before the Pennsylvania Pharmaceutical Association.

Home Made Extract of Beef.

BY JACOB PRICE, M. D.

West Chester, Pa.

A reliable and palatable extract of beef, that can be quickly prepared, and at less cost than most of the preparations of this class upon the market, is an important desideratum I have found such an extract made in the following manner very satisfactory. It is somewhat in the line of Liebig's original formula.

Take of official hydrochloric acid, f℥i; essence of pepsin (Fairchild's, I have commonly used), f℥ ij, and mix them. Of this mixture three teaspoonfuls are to be added to one pound of finely minced lean beef and placed in a quart jar, which is to be nearly filled with cold water. The jar should be tightly covered, the mixture well shaken, and the shaking repeated every half hour. It must be kept cool—in hot weather on ice. After two hours it will be ready for use.

The amount ordinarily taken at one time would be about f℥ij. This should be salted to taste, and five drops of tincture of capsicum added. Where there is much objection to the taste, a little Burgundy wine may be added.

These directions may appear to some to include an amount of unnecessary detail, but in the preparation of such an extract, as in most other matters in medicine and surgery, it is careful attention to detail

that alone insures success. Frequently it is necessary to especially emphasize the instructions as to shaking, and the avoidance of boiling or in any way heating the preparation. The beef should be allowed to remain in the jar till all is used that can be taken up with a spoon; then considerably more of the extract can be obtained by turning the beef out into a strong linen towel and twisting it fimly.

Such a concentrated, partly digested food is particularly indicted in cases of gastric catarrh, and in other conditions, acute or chronic, attended with deficiency of the normal secretions of the stomach. I also depend very much upon it in cases of typhoid fever and pneumonia. It is more readily assimilated than any other article of food that I know of—*Phil. Poly. Jour.*

A Critical Study of Bettendorf's Test and its Modifications.*

BY DR. CHAS. O. CURTMAN.
Chairman of Research Committee B.

A number of experiments have been made for the purpose of ascertaining the conditions most favorable to the result of the test for arsenic by stannous chlorid (Bettendorf's test and its modifications).

The inquiry was directed to the following points:

1. The limit of sensitiveness of the test in its various modifications.
2. The best proportion of reagent to specimen.
3. The influence of the use of metallic tin together with the stannous chlorid.
4. The influence of the presence of other substances in the specimen tested.

I. LIMIT OF SENSITIVENESS.

The following reagents were used:

a. The solution directed for Bettendorf's test by the U. S. P., consisting of a saturated solution of pure stannous chlorid in pure concentrated hydrochloric acid. The specific gravity of this solution was = 1.467.

b. Metallic tin, perfectly pure, in thin cylinders, from which shavings of about 0.1 Gm. were taken as needed

c. Stannous chlorid solution prepared according to the German "Arzneibuch" by saturating a mixture of 5 parts of crystals of stannous chlorid and 1 part of hydrochloric acid with dry hydrochloric acid gas. The specific gravity was = 1.912.

All the materials used were previously tested for absence of arsenic by Gutzeit's test, so as to exclude any fallacies arising from the introduction of even small traces of arsenic by the reagent, which might cumulate with those in the specimen.

It is easy enough to procure pure metallic tin, but impossible to obtain from local dealers hydrochloric acid sufficiently free from arsenic to stand Gutzeit's test for one hour; so that I had to distill from purified sulphuric acid and pure sodium chlorid the hydrochloric acid required for the preparation of the reagents.

A number of specimens of arsenic solution were made, containing free trioxid, sodium metarsenite and sodium arsenate in such proportion, that each set corresponded exactly to an equal amount of As. They were:—*Arsenic trioxid* (As_2O_3 = 197.68), of which 1.31062 Gm. contain 1 Gm. of As.

Sodium metarsenite (Na As O_2 = 129.82), of which 1.7332 Gm. contain 1 Gm. of As.

Sodium arsenate, U. S. P. ($Na_2HAsO_4 + 7H_2O$ = 311.46), of which 4,51834 Gm. contain 1 Gm. of As.

The solutions used for experiments contained from 0.5 Gm. to 0.01 Gm. of As.

Of these 1 Cc. was used for each trial and the amount of reagent mixed with this varied from 1 Cc. to 3 Cc. so as to correspond with the limits prescribed in the pharmacopœial tests. When metallic tin was added to the reagent, 1 Cc. each of the specimen and the stannous chlorid solution was used. In some cases of doubt a tenfold quantity (10:30 Cc., etc.) was used, to obtain sufficient material for colorimetic comparison.

A uniform application of heat was effected, whenever needed, by imbedding the series of test tubes under observation to an equal depth into a sandbath, heated to about 80° C.

Whenever comparisons of color became necessary to decide whether a deeper color had been produced than that of the unaffected reagent (as was especially necessary with the yellowish solution of the German Pharmacopœia), or whether a greater or less intensity of color characterized the reaction, narrow graduated cylinders of 10 cubic centimetres capacity, were used in a dark box, with light reflected from beneath, or occasionally, for still greater accuracy, a pair of Hehner's colorimeter cylinders of 100 Cc. capacity, also placed for observation into a dark box, admitting from beneath light reflected upward by a plate of milk glass, placed at an angle of 45°.

With the aid of these appliances the following results were obtained:

a. With the U. S. P. solution of stannous chlorid, of specific gravity 1,467, 1 Cc. of each of the three specimens, containing 0.5 Mgm. of As was mixed in the different proportions stated below, and kept at ordinary temperature for one hour.

With 1 Cc. of reagent a sharp reaction had taken place at the end of the hour.

With 2 Cc. of reagent the reaction was obtained earlier and was more intense at the end of one hour.

With 3 Cc. of the reagent, the reaction was still more speedy and at the end of the hour more intense.

No difference could be noticed either in time or in intensity between arsenic in the state of trioxid or pentoxid.

When the test tubes were arranged exactly as before, but placed in hot sand, the time was somewhat shortened, and a slight increase of intensity noticed in all of the specimens.

b. When 1 Cc. of the U. S P. solution was used with 1 Cc. of solutions containing 0.5 Mgm. of As and a small piece of metallic tin added, and heat applied, the reaction was almost instantaneons, and in 3 minutes very sharp, unmistakable coloration appeared, which continued to increase in intensity for about 10 or 15 minutes, but was not notably darker at the end of the hour. No difference appeared in the different solutions containing arsenite or arsenate.

c. When from 1 to 3 Cc. of the stannous chlorid solution of the German pharmacopœia was used with 1 Cc. of the solutions containing 0.5 Mgm. of As, there was a slight darkening of the color in a few minutes, which continued to increase to the end of the hour. No difference was perceivable between the arsenous and the arsenic preparations. At 15 minutes, the specimens treated by the U. S. P. solution and metallic tin showed a much greater intensity of color, but toward the end of the hour there was but little difference perceptible between the color of the specimens treated with 3 Cc. of the German reagent, without heat, and that treated with 1 Cc. of the U. S. P. reagent, metallic tin and heat. The specimens containing less than 2.5 Cc. of reagent showed a less intense color.

These experiments were repeated with the three solutions containing 0.5 Mgm. As in 1 Cc. and resulted as follows:

a. With the U. S. P. solution of Sn Cl_2:—

1 Cc. of reagent gave no reaction during 45 minutes, then gradual coloration began. If heat be applied the reaction begins in 18 minutes, and at the end of one hour is slightly more intense than when treated without heat.

1.5 Cc. of reagent: reaction slightly more rapid and intense than with 1 Cc.

2.0 Cc. of reagent: still more rapid and intense, both with or without heating.

2.5 Cc. of Sn Cl_2: reaction begins in 15 minutes at air temperature, in less than 5 minutes when heated.

3.0 Cc. of Sn Cl_2: reaction slightly less intense than with 2 5 Cc., both hot and cold.

3.5 Cc. of reagent: a still further slight decrease in intensity.

No difference could be observed in the reaction of As_2O_3 and As_2O_5; the sodium metarsenite appeared to be very slightly more colored than As_2O_3.

b. With 1 Cc. of U. S. P. solution and a small piece of metallic tin, at a temperature of about 80° C., 1 Cc. of the solutions containing 0.05 Mgm. of As began showing a brownish color at 13 minutes At 35 minutes the reaction was quite sharp and continued to grow slowly in intensity to the end of the hour.

No difference was perceptible between As_2O_3 and As_2O_5.

c. 3 Cc. of the solution of the "Arzneibuch," mixed with 1 Cc. of the solutions containing 0.05 Mgm. of As began showing a feeble reaction at 35 minutes, and at the end of the hour, showed a plain reaction, as compared with the unchanged solution, but did not equal in intensity the reaction produced by the addition of metallic tin.

On repeating the experiments with solutions containing 0.03 Mgm. of As in 1Cc. a feeble reaction resulted from the use of stannous chlorid and metallic tin at the end of an hour, but even after standing over night, the other methods gave such a faint reaction, that it required close inspection in the colorimeter to perceive the change. A solution containing 0.02 Mgm. of arsenic failed to show any reaction. So I think that *for practical purposes*, the utmost limit of reaction is reached at 0.03 Mgm. of As in 1 Cc. and that the method employing metallic tin and heat is to be preferred, where the presence of antimony or bismuth does not forbid its use. Even the addition of pure concentrated sulphuric acid, which was recommended when the test was first introduced, has not yielded to me any substantial advanage in detecting the presence of arsenic in the greater dilutions.

2. THE BEST PROPORTION OF REAGENT TO SPECIMEN.

In the foregoing experiments and a number of others conducted for that purpose, it was observed that both with the U. S. P., solution (without the use of metallic tin) and with that of the German Pharmacopœia, the greatest intensity of color obtained after an hour's reaction occurred when 1 Cc. of the arsenical solution was mixed with 2.5 Cc. of the reagent. Between 3 Cc. and 2 Cc. of the

*Report No 1. of Research Committee B, of the Committee of Revision of the U. S. P., 1890, read at the meeting of the Missouri Pharmaceutical Association.

German solution hardly any difference could be found. But with the pale U. S. P. solution a very slight difference appeared in favor of 2 Cc. as against 3 Cc. Heat did not appear to affect the proportion needed.

When metallic tin was added it seemed to be best to use equal volumes of specimen and reagent, although the variable amount of dark coatings of reduced arsenic adhering to the tin prevented an accurate comparison.

3. INFLUENCE OF THE USE OF METALLIC TIN TOGETHER WITH STANNOUS CHLORID.

When metallic tin is heated with pure concentrated hydrochloric acid, a copious evolution of hydrogen results. When heated with the saturated solution of stannous chlorid in hydrochloric acid, the evolution of hydrogen is but scant. When arsenic is mixed with the solution, the evolution of gas is perceptible, but very feeble. Very little arsin appears to be evolved, for a paper cap with a drop of acidulated silver nitrate does not show any evidence of reduction by As H_3 for over fifteen minutes, and even at the end of an hour but a very faint arsenic reaction is seen. To ascertain whether any of the arsin formed, would react with the stannous chlorid and thus hasten the reduction of As, I arranged a small apparatus in which a copious current of arsin mixed with hydrogen was generated, and, after passing through a bottle filled with dry cotton, was permitted to bubble through stannous chlorid solution of the U. S. P. After more than an hour's time, not a trace of coloration could be detected.

So that after arsin has once been formed, it is not again decomposed by stannous chlorid. Hence the prompt action of metallic tin must depend upon the nascent hydrogen, which aids the stannous chlorid in reducing the trioxid and pentoxid.

But however satisfactory the action of metallic tin in accelerating and intensifying the reduction of arsenic, it cannot be employed to detect arsenic in preparations of bismuth or antimony. For the metallic tin reduces both of those metals and precipitates them from their solution as black flocculi, which aggregate into small granular lumps. There could be a distinction made between the firm flocculi of Sb or Bi and the finely divided brown particles of arsenic, but it would hardly be safe to trust to this appearance for a sufficient evidence of the presence of arsenic, and the preparations of Bi and Sb must be tested without the aid of metallic tin.

A number of specimens of pure bismuth and antimony salts were tested with the U. S. P. and the German solution of stannous chlorid in various proportions. But neither at ordinary temperature, nor when heated did the least coloring occur.

4. INFLUENCE OF THE PRESENCE OF OTHER SUBSTANCES IN THE SPECIMEN TESTED.

The preceding experiments were made with a solution of either arsenic troxid or sodium arsenite or arsenate in water, other substances being absent. But in testing various chemicals for traces of arsenic there are different conditions, as the arsenic forms only a very small portion of the mixture. In the U. S. P. the Bettendorf test is directed for 11 preparations: For hydrobromic, hydrochloric, phosphoric and sulphuric acid, 1 Cc. of the acid is to be tested by mixing with 1 Cc. of the reagent, adding a small piece of tinfoil and heating. In case of magnesium sulphate 1 Gm. of the dry substance is to be shaken with 3 Cc. of the reagent, metallic tin is then to be added and an hour allowed for the appearance of the reaction; sodium phosphate and pyrophosphate are treated in like manner, but heat applied and 15 minutes time given.

In case of antimony and potassium tartrate, antimony oxide, bismuth subcarbonate and bismuth subnitrate, it was intended to test with stannous chlorid alone for an hour, but by an unfortunate misunderstanding of the transcriber, tinfoil was directed to be added, which will reduce Bi and Sn as well as As.

To find whether any of the chemicals directed to be tested by the stannous chlorid method could influence the detection of arsenic, specimens were prepared containing the pure chemicals, shown to be free from arsenic by other tests, and with these small portions of arsenic were mixed, and the tests compared with those in which arsenic was present in equal amount without admixture with the chemicals.

In no case could any difference in the intensity of the test be made out, nor were the differences in the time of the occurrence of the coloration sufficiently great or regular to justify the assumption that the reaction was impeded or accelerated by the presence of other salts.

Bulletin of Pharmacy.

Further Contribution on the Alkaloidal Assays of Drugs.*

BY KARL SCHWICKERATH, PH.D.

In my last contribution to the alkaloidal assay of drugs and galenical preparations, I proposed to substitute the use of a mixture of petroleum ether (boiling-point about 50° C.) and chloroform, in the proportion of 2 to 1, for absolute ether in the extraction of the alkaloids. Not only on account of its costing less is this mixture to be preferred, but, as experience has shown, an absolutely pure alkaloid is obtained by this method. In additional experiments I have further tried to substitute the ether in "Prolius mixture" by petroleum ether-chloroform. In the "Prolius mixture" the alcohol is added for the purpose of moistening the dry cells of the drug in order to facilitate the penetration of the ether. But as alcohol is not miscible with petroleum ether-chloroform, and as the alkaloids are, moreover, soluble in alcohol, for obvious reasons the latter cannot be used in this operation for moistening the drugs. As most alkaloids are soluble with difficulty, or nearly insoluble, in water, and as, on the other hand, petroleum ether-chloroform is not miscible with water, there is no objection to the moistening of the drugs with water.

I deem it but just at this point to call attention to the fact that, after my experiments in this direction had been for some time under way, C. C. Keller, of Zurich, made known the fact that he was using water as a moistening agent in some alkaloidal assays. I have obtained very good results by this method, the percentages of alkaloids not being less than those obtained with the method given by me in this journal (vol. vii, p. 534, and vol. viii, p. 56), the exceptions being hyoscyamus and stramonium.

On account of the relatively ready solubility of hyoscyamine in water, the results obtained by this method were, as might naturally be expected, too low; therefore, for these two drugs the "Prolius mixture" is to be preferred.

The method of procedure in the examination of a drug would conseqnently be as follows:

First, the drug is to be moistened with a sufficient amount of water, whereupon a certain quantity of petroleum ether-chloroform and strong ammonia is to be added and this mixture is to be shaken vigorously for several hours.

The alkaloids are dissolved in the petroleum ether-chloroform; an aliquot portion of the solution, filtered through cotton, is placed in a shallow glass vessel containing 10 Cc. of dilute acid. Petroleum ether and chloroform are then evaporated at a low temperature, a current of air being passed over the solution during the process. Chlorophyll, resin, wax, etc., are deposited upon the surface of the acid alkaloidal solution; the resinous and waxy particles adhering to the glass are to be thoroughly worked out with the dilute acid by means of a little platinum spatula or glass rod, whereupon the solution is filtered through paper either into the *perforator* (if the *perforation method* is used),† or into a *separator funnel* (if the *shaking method* is preferred). The filter, as well as the glass vessel, is to be washed by small, successive quantities of water, used to extract the resinous matter. The acid-alkaloid solution thus obtained is of such purity that in most cases washing of this solution with petroleum ether is unnecessary and the alkaloid may be extracted with petroleum ether-chloroform directly. Further details may be learned from the annexed tabulated results. The drugs here taken into consideration are not especially selected, but were submitted to me for examination in the regular course of manufacture.

With some alkaloids, such as the cinchona alkaloids, hydrastine, etc., it may happen that towards the end of the extraction, if the alkaloidal solution is too concentrated, the alkaloids will crystallize out, which renders their extraction considerably more difficult. In this case muriatic acid should be added through the little funnel until the liquid is decidedly acid, the solution being stirred up with the stem of the funnel; and after the alkaloids are again dissolved they should be reprecipitated with alkali.

In the examination of conium I adopted a proposal of Liljenstroem,* placing in the little flask 10 Cc. $\frac{N}{10}$ sulphuric acid at the beginning of the extraction. I think, however, that benzin answers better for the extraction of coniine than does sulphuric ether. In the drug, as well as in the extract of conium, it is very probable that ammonium compounds are present; the caustic soda or sodium carbonate added for the separation of coniine would not only set free the coniine but also ammonia, which would be carried over into the flask by the ether saturated with water, and so cause a higher result. In the use of benzin this defect is largely removed.

The annexed assay methods given for the drugs are of course also applicable to the examination of *fluid* and *solid extracts*. In place of the given weight of drug, the corresponding volume in cubic centimeters of fluid extract and about the fifth part in weight of solid extract are to be taken. The latter is to be dissolved in dilute alcohol and then evaporated—as with the fluid extract—on the least possible amount of cleansed sawdust, at a moderate temperature. The dry mixture thus obtained is then to be moistened with a sufficient quantity of water and treated in the same way as the correspond-

* *Pharm. Ztg.*, 1894, p. 56.

†AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, Vol. xxii., p.p. 180, 372, and Vol. xxiii., p. 113.

ing drug. The extracts of cinchona, ipecacuanha and nux vomica can be worked up directly, as I have shown in this journal, February, 1894, pages 56-57. [The author gives full tables of the results attained by these methods.]

Drug Adulterations.*

CRUDE DRUGS.

One of the most interesting events of the year, in the field of adulterations, was an attempt to introduce into the United States from England, badly adulterated asafœtida. Some of the samples that our dealers tried to get in and palm off on retailers, contained only about 15 per cent. of gum, instead of the regulation 50 per cent. of the custom house. Several large orders of ipecac root have likewise been returned because of adulteration with other roots, and also because of a superabundance of stems. It is said, however, that these same goods are likely to be made into powdered ipecac and again returned in a form that is more difficult to guard against fraud. It is a good thing that customs officers are trying to perform their duties properly at present, and it is to be hoped that they will continue in such well-doing.

LIQUORS.

It is probable that our liquor supplies are tampered with as much or more than any other class of goods carried by pharmacists. Of five samples each of brandy and whiskey, as supplied to the metropolitan retail trade, only two of one and one of the other could be deemed good. Two of each contained less than 40 per cent. of alcohol by volume, and three of the brandy and four of the whiskey were colored with caramel and flavored with essential oils. Every druggist should test his stock of such goods and report to his jobber. The State liquor law has practically made it impossible for a druggist to sell enough in ten years to pay his license for a single year. There are no drug stores known to this committee where doctors prescribe enough liquor to pay anything like $20 per year. If, then, any is kept in stock, it should be of the best quality. Any pharmacist can apply one or two rough tests that will answer his requirements. When half an ounce of liquor is shaken up with two drams of concentrated ether, on settling it should show a line of demarkation at the same height as when the same test is applied to a sample of dilute alcohol that he knows to contain 50 per cent. by volume of absolute alcohol. On evaporating a weighted quantity over a water bath, the dried residue should not weigh more than $\frac{1}{100}$ of the total weight, and should not taste or smell of caramel, and should not taste unusually sweet or have a spicy flavor.

MUSTARD.

If there is any article that beats liquor in amount of sophistication, it is probably mustard. Extensive dealers positively assert that a perfectly pure mustard can not be sold. The public will not buy it. Of three brands examined, all contained turmeric and flour in varying amounts. Not long ago Mr. Hans M. Wilder reported an examination of mustard and rhubarb, and the finding of tumeric in each. On this suggestion, some rhubarb was examined.

RHUBARB.

Of three samples bought in New York two gave evidence of tumeric by Mr. Wilder's test; 17 bought in the interior of the State from as many druggists all turned out good. Mr. Wilder's test for tumeric in rhubarb or mustard is a very simple one. A little powdered rhubarb or mustard is placed on a slide with some essential oil such as anise, fennel or sassafras. Examination under the microscope reveals a yellow zone around every speck of tumeric. When this drug is absent the microscope field is uncolored.

GINGER.

For some time past, the English courts have been busy prosecuting druggists and grocers for selling powdered ginger adulterated with the same drug that had been exhausted. A large number have been fined, no matter what excuse they gave. Here in America the demand for powdered ginger, in our large cities at least, is not great enough to tempt cupidity to such a trick. It is a cute one, however, and might be thought worthy of the proverbial Yankee. This plan of making money does not seem to have crossed the Atlantic yet. Of 15 samples bought in our interior cities and villages all were good, and three from New York were likewise unobjectionable. It might be well to watch this article in future, as tricks of this kind are catching, and as our jobbers have plenty of exhausted ginger and other drugs left over during manufacturing, an unscrupulous one may take to it.

CAPSICUM.

Out of 17 samples examined, 13 were good, 1 fair and 3 inferior.

DANDELION.

Out of 12 samples examined, 10 were good, 1 fair and 1 inferior.

DILUTED ACETIC ACID.

Two hundred and thirty-one samples were examined. Good (5.5 to 7 5 per cent.), 61; fair (4 5 to 5.4 per cent), 52; inferior (under 4 5 per cent.). 78; excessive strength (over 7.5 per cent.), 34; not as called for, 6. Varied from 1.20 to 35 per cent.

DILUTED HYDROCHLORIC ACID.

Two hundred and thirty-two samples were examined. Good (9 to 12.5 per cent.), 151; fair (7 5 to 8.9 per cent.). 45; inferior (below 7 5 per cent.), 32: excessive strength (over 12.5 per cent.), 4. Samples varied from 1 to 13.10 per cent.

DILUTED SULPHURIC ACID.

(Standard same as for preceding.) Two hundred and fifty nine samples were examined. Good, 171; fair, 33; inferior, 11; excessive, 44. Varied from 1.30 to 25 per cent.

AROMATIC SULPHURIC ACID.

Two hundred and eighty-nine samples were examined. Good (16 to 25 per cent.), 29; fair (13 5 to 16 per cent.), 93; inferior (under 13.5 per cent), 167. Varied 1.30 to 25 per cent.

WATER OF AMMONIA.

Two hundred and ninety-seven samples were examined. Good, 77; fair, 66; inferior, 94; excessive strength, 54; not as called for (that is, error in sale), 6. Samples varied from 1.60 to 25.60 per cent.

STRONGER ETHER.

One hundred and forty-four samples were examined. Good, 91; fair, 7; inferior, 46. Specific gravity varied from 0.724 to 0.771.

COMPOUND SPIRIT OF ETHER.

Two hundred and six samples were examined. Good, 54; fair, 22; inferior, 129; not as called for, 1. Inferior samples were deficient in or destitute of ethereal oil.

TINCTURE OF IODINE.

Two hundred and thirty-seven samples were examined. Good (7 to 10 per cent.), 57; fair (6 to 7 per cent.), 96; inferior (under 6 per cent.), 81; excessive strength (over 10 per cent.), 3. Varied from 1.20 to 12.40 per cent.

COMPOUND SOLUTION OF IODINE.

One hundred and nine samples were examined. Good (4 to 7 per cent.), 68; fair (3 to 4 per cent.), 23; inferior (below 3 per cent.), 7; excessive strength (above 7 per cent.), 1; not as called for, 10. Per cent. of iodine varied from 0.30 to 9.10.

MAGNESIA.

One hundred and eleven samples were examined. Good, 52; fair, 3; inferior, 50; not as called for, 6.

CREOSOTE.

Two hundred and twenty-two samples were examined. Good, 119; fair, 1; inferior (chiefly carbolic acid), 102.

The condition of the drug market in Ohio, especially around Cincinnati, must be very bad, if we can judge from the reports of Food Commissioner McNeal. Had your committee had the time at its disposal, the same kinds of goods would have passed our inspection, so that we could have compared our own supplies with theirs. Their examination of cod-liver oil has proven that a large amount of it now on the market is adulterated with cottonseed oil, and many preparations of wine and cod-liver oil have been proven to contain no cod-liver oil whatever. Some samples of lemon oil have disclosed 55 per cent. of turpentine, 15 per cent. of resin, 25 per cent. of lemon oil, and 5 per cent. of water and alcohol. Juniper oil is found to be in about the same condition, and in a number of preparations of wine, beef and iron, no beef is discoverable, and but a very small quantity of iron salts. It is probable that the names of the producers of these spurious articles will be disclosed by the commission.

In other drugs, the following summary tells what Commissioner McNeal found in the drug stores of his city:

Cream of Tartar.—Grossly adulterated.
Alcohol.—Diluted with water.
Salol.—Short weight.
Borax.—Not pure.
Epsom Salts.—About one-half strength.
Cinchona Bark.—Cheapest grade.
Opium.—Exhausted, used before for tincture.
Spices.—Aculterated with cheap grade meals and starches.
Cinnamon.—Mixed with allspice and common oak bark.
Linseed Meal.—Deprived of oil.
Quinine.—Inferior quality and short quantity.

We do not think the New York market would, in any of these articles, make as bad a showing. In some of them we know that in the past years of our work no such bad results appeared. For a long time it has been reported that phenacetin is being adulterated with acetanilid. In all past examinations of this article no such sophistication had ever appeared until, during the past winter, one such sample turned up.

PROPRIETARY ARTICLES.

It is a common thing for pharmacists in and out of the State to ask us to discover for them the composition of certain proprietary articles that are having considerable sale in their regions. In response to these calls a number of these preparations

*From the report of the Committee on Adulteration of the New York State Pharmaceutical Association, read at an annual meeting in Saratoga Springs, June 28, 1894.

have been examined, not always exhaustively, but for the purpose of discovering, if possible, their active constitutents. The latest of these calls have been for Antikamnia, Soothing Syrup, Paskola, Samaritan Nervine, and a number of hair dyes. A Macedonian cry from far-off Colorado asks for the active constituents of Birney's Catarrh Cure, but we have not yet had time to carefully examine it. A preliminary test has given approximate evidence, and the results will be revealed later.

In the case of Antikamnia a large number of analyses have been reported, no two of which are exactly alike. Either the manufacturers alter the composition immediately after its exposure, or the chemists have not worked with sufficient care. As our quantitative determination has not yet been verified by re-trial, we will content ourselves with merely giving the ingredients at present. There can be no doubt of its containing acetanilid as its chief constituent. With equal certainty we can affirm the presence of caffeine. Citrate of sodium is also present in every sample so far examined. Whether they introduce it into their preparation in this form is in doubt. The presence of sodium bicarbonate is also certain. There is some sodium carbonate likewise, but whether introduced as such by the manufacturers is doubtful. There is no tartaric acid nor tartrate in the article they now make. The fusing of a small sample in a test tube tells immediately a genuine Antikamnia from a spurious one. The behavior of the citrate of sodium in the melted acetanilid is the cause of the difference. Out of eight samples bought in Brooklyn, three proved to be bogus. They were all bought from parties that there were reasons for suspecting. This is why the proportion is large. It is not likely that three more could be found in the city.

Winslow's Soothing Syrup has, from time to time, been reported as containing morphine, and in dangerous amounts. The examination of one bottle revealed the presence of this alkaloid with certainty. An exact determination of the quantity would have required a number of bottles and more time than could then be given.

Paskola is a new remedy that has lately been very extensively advertised. The proprietor puts it forth as a food rather than a medicine. Our well-beloved C. H. Butler must have been trying to perpetrate a joke upon them when he wrote: "A young lady just in reports a gain of five pounds after the use of two small bottles of Paskola." Perhaps they know how one pound could become five, and how that young lady guarded against errors in weighing. Did she have exactly the same clothes upon her and exactly the same amount of food and same quantity of water in her stomach at each weighing?

Our analysis of this new proprietary claimant for public favor shows a composition of glucose syrup and muriatic with a little sulphurous acids. The latter are present in the proportion of between two to three-tenths of 1 per cent. total. This seems to be enough to give it a sourish taste, disguise its true character and keep it from becoming alcohol or vinegar. Almost everybody knows the nature of these acids. Their presence in Paskola is absolutely certain. How much reliance, then, can be put upon the claims of a firm that says: "Paskola is *only* a pure starch pre-digested food, combined with natural vegetable ferments which aid the digestion of other foods." On the bottle there is a picture of a pineapple blown in the glass. Supposing that there might be some truth in this statement of theirs and something suggestive of the figure, an attempt was made to digest a little albumen with a liberal amount of Paskola. The attempt was a vain one. If any pineapple ferment (bromelin) was present it could not be discovered, and had no digesting power. A miracle alone could make their claim reliable. The natural vegetable ferments must have changed into muriatic acid, a thing as impossible as the turning of water into gold.

In their circulars there is nowhere a distinctly made claim that they discovered pre digested starch, but their words are so framed that such an impression is quite natural. But pre-digested starch is not their discovery. Glucose has been made for years from corn. It is now being made in large quantities, and can be bought at a very low rate. Under its true name public sentiment is rather against its use. Large amounts of it are used in making the cheapest and poorest candies. Candy makers are generally ashamed to confess that they use it at all. The price per pound is much less than that of the cheapest sugar. A full bottle of the size that 50 cents is charged for under the fanciful name, costs but a trifling sum. When the analysis was made it was necessary to get some. After meeting considerable trouble in finding a confectioner who would confess that he had any we finally secured a supply of half a pint. Although the man was a stranger, he frankly acknowledged that its value was so small that he would charge nothing. To all who have used this new proprietary article and think they have derived benefit therefrom, we would advise them to save their money by getting glucose syrup, and to every half pint adding about 25 drops of pure muriatic acid and from 3 to 30 drops of sulphurous acid solution, according to its strength. If the claims made by these people for pre-digested starch were really true, candy-eating children should all be healthy and fat. Those that eat the poorest candy should be the fattest. Solid facts are against them. Injury and not benefit seems frequently to result. The absorption by the stomach directly into the blood of an article that nature never designed to enter by way of that organ cannot be expected to result in permament good. When starch is digested in the system, the absorption is always in the intestines and by way of the lacteals. If taken as glucose these organs are forced to alter their functions and act in a way nature never provided for. The claim is virtually that the Creator made a mistake which these people have found how to remedy. Physiology is certainly against them. Some of those who take it may require and therefore be benefited by the muriatic acid, but the large majority of those who try it can only in the long run expect injury from its continuous use, since they will not require it. To all such both the glucose and the acid must act as foreign bodies to be discarded rather than assimilated.

The pretense that glucose can take the place of cod-liver oil in the treatment of consumptives seems to the writer to be sheer nonsense, and shoots wide of their own logic. If they really, as they claim, aid nature by pre-digesting starch for their patients, then surely cod-liver oil must aid it more by being several steps nearer the final product aimed at by digestion. The final animal product into which starch must go is fat. Glucose is but a single step in this direction. If one step is good several steps must be better, and these several steps are already taken in cod-liver oil. They would be right in their theory if they could get their glucose past the stomach and into the intestines before absorption. Then it would enter the right channel and do its intended work. It would thus save labor to the weakened organs. But, unfortunately, the stomach carries it immediately into the blood before being properly prepared therefor, and woe to the poor fellow who has diabetes or even a predisposition to that disease. They will give to such a patient fuel to heighten the flame of the fire that is burning up his life. Such patients rarely know of such a weakness of their constitution and the insidious glucose will sap their vital forces all unknown to themselves until too late. Cod-liver oil is not absorbed by the stomach, but enters the intestines, is changed into an emulsion, and is then absorbed into the lacteals through the channels nature designed such food to go.

Samaritan Nervine is not heard of now as frequently as it used to be. There are, still, however, many who take it and believe they derive benefit from its use. The active constituent was found, on analysis, to be bromide of potassium, of which it contained a little less than 15 grains to the teaspoonful.

Hair dyes are frequently called for, and a knowledge of their composition may often prove beneficial to pharmacists and their customers. An imported article known as "Eau Charbonnier Tinctorial Vegetal," contained in its large blue bottle a solution of nitrate of silver in ammonia water, and in its small colorless one a solution of pyrogallic acid.

Damschinsky's Liquid Hair Dye, brown, contains copper, sulphur, acetic ether and pyrogallic acid all in one bottle.

Imperial Hair Regenerator, dark brown, No. 2 contains in bottle A an ammoniacal solution of the nitrates of silver and copper, while bottle B is a solution of pyrogallic acid.

F. F. Marshall's Adonine, brown, contains in bottle No. 1 pyrogallic acid solution; No. 2 has a solution of nitrate of silver, and No. 3 a solution of chloride of gold. A small bottle of perfumery was done up in the same package.

Eau Merveilleuse contained in No. 1 a solution of pyrogallic acid, and in No. 2 one of nitrate of silver.

Iceland Moss—Two New Preparations.

Oefele gives the following formulæ for the preparation of iceland moss, which is again coming into repute in the treatment of phthisis, anæmia, and other wasting diseases:

INFUSION OF ICELAND MOSS.

Iceland moss	20 parts.
Ammonium carbonate	1 part.
Boiling water	200 parts.

Mix and macerate for thirty minutes, then bring to a boil, strain, and to the colute add 70 parts of absolute alcohol. Let stand until settled, then decant and add to the clear liquid 30 parts of liquorice juice. The dose is from one to two tablespoonsfuls thrice daily.

TINCTURE OF ICELAND MOSS.

Iceland moss	20 parts.
Ammonium carbonate	1 part.
Absolute alcohol	100 parts.

Mix and macerate for twenty four hours, then bring to the point of ebullition, strain while hot, let stand until cold, and finally filter. Dose, 1-2 teaspoonfuls thrice daily.—*The National Druggist.*

Trusts, Pools, and Corners.*

There is probably no industry in the world so honeycombed with combinations of factory owners and traders banded together for the avowed purpose of artificially maintaining the selling price of certain special commodities, as that of chemical and pharmaceutical manufacturers. In raw drugs, indeed, especially in those of vegetable origin, the old monopoly days are gone almost beyond the possibility of recall. These commodities cannot now be brought under speculative control with the same ease as in the days when their sources of supply were fewer, and the trade routes by which they found their way into commerce more easily supervisible. But as a set-off to the greater freedom of competition in crude drugs there is a growing tendency to control by means of rings or syndicates, drugs and chemicals of inorganic origin, and of a kind which can be made available to the consumer only by means of intricate or expensive processes of manufacture. To name only a few of the commodities thus affected, syndicates exist for the object of controlling the price or the output of alkali, mercurial preparations, bismuth and bismuth salts, crude iodine, iodides, cocaine salts, refined camphor and borax, bromine and its preparations, salicylate, oxalic acid, arsenic, sugar of lead, chloroform, phosphorus, permanganate of potassium, and many other of the most important products handled by the pharmacist. With one or two exceptions these combinations, no doubt, dwindle into insignificance beside such mammoth "trusts" as the Standard Oil Company, the Cotton-seed Trust or the Amerinan Whisky Trust, but the principle which underlies them all, great or small, is the same, and there is no economic question of the day of more palpable importance to the dealer in chemicals than that of the gradual monopolization of large fields of his activity by organizations whose interests are in direct opposition to those of the middleman, and from whom the consumer has much more to fear than from the unsystematised efforts of a band of small rival producers.

In a little half-crown volume just issued as one of a series on "Social Questions of To-day," Mr. J Stephen Jeans, the author of several books on commercial questions, gives the results of an inquiry instituted by him into the principles and recent operation of combinations and syndicates to limit production and increase prices.† The material for writing a history of "Trusts" is so enormous that one can hardly expect in an octavo book of 186 pages, more than the barest outline of the Trust system and its influence upon modern commerce, but Mr. Jeans has made good use of the small space at his disposal.

He sets out with the excellent idea of writing a perfect unbiassed history of the movement. So imbued is he, indeed, with the idea, that, after all these monopolies, like the Father of Evil in the Golden Legend, may be "working for some good, by us not understood," that he refuses to call them by their usual British name of Rings, and elects the singularly inept American expression "Trusts" as being more inoffensive. But as the author proceeds his wrath with the palpable inquities of the system occasionally gets the better of him, and leads him into spasmodic denunciations of a system which, after all, is but the natural outcome of modern industrialism, and against which no legislature has yet been able to frame effective enactments. The "conspiring of two or more persons for the purpose of benefiting themselves financially" is probably as old as commerce itself.

Naturally, the economic effect of such "conspiracies" becomes more perceptibly in the same measure as the development of machine production causes the output of almost every class of manufactured commodities to outrun the requirements. Until the beginning of the present reign there still remained in force many of the old English laws against "badgering," or buying in a market before the regular hour; "forestalling," or buying provisions on their way to market "engrossing"—*i.e.* buying to sell again in or near the same market; and "regrating," by which was meant dissuading persons from taking goods to market, or buying commodities in large quantities to sell again. Under the act. Vict. 7 and 8 the whole remnant of these statutes was swept away and throughout the long reign of the commercial policy of Cobden and Bright, which is only now beginning to be seriously challenged, the tendency of legislation was in direct opposition to all interference with commercial and industrial activity. The present position at law of "Trusts" in this country was settled in 1889 by the Court of Appeal. The case which gave rise to this decision was that of the Mogul Shipping Company, who sued a combination of shipowners for unlawful conspiracy to deprive them of their share in the Chinese tea-shipping trade. A ring had been formed to secure control of that trade, and when the Mogul Company, who were excluded from the combination, began to cut the rates, the "Ring" sent a circular to the China merchants warning them that they would lose certain advantages granted to traders shipping tea by the "Ring" vessels if they dealt with the Mogul Company. The court dismissed the Mogul Company's suit on the ground that a combination of traders was not illegal, provided its members did not circulate false rumors or resort to intimidation or fraud.

In France, article 419 of the Penal Code prohibits any combination for the purpose of raising or lowering prices, under penalty of at least one month's imprisonment and a fine of from 500f. to 10,000f. This law is, of course, utterly inoperative. In Germany there is no legislation against syndicates, and hundreds of such combinations exist. Indeed, most of the "syndicates" in pharmeceutical goods to which we have referred are of German origin. The protective tariff of Germany is, of course, of immense advantage to the syndicates, inasmuch as it prevents foreign manufacturers from competing in the home market. The result is that many German syndicates are able to wring large profits out of their own countrymen, and, at the same time, periodically to swamp foreign markets (especially British ones) by shooting out upon them the surplus stock which they cannot place in Germany, and which they can afford to sell at a loss in consideration of the large percentage of gain on their home sales.

The two principal combinations of the present day are the Salt and Alkali Unions. To the latter which he calls the "British Chemical Trust," Mr. Jeans devotes a whole chapter of his book, giving it full and deserved credit for prudent and business-like management. The Salt Union is dismissed with less ceremony, and no reference is made of the fact that its operations have practically resulted in the loss of our chief foreign markets for the commodity.

In the middle of the fourteenth century the English tinmines were monopolized by a German *entrepreneur*, and a hundred years later all the known resources in alum were monopolized by the "king's merchants," whose business was legalised by a patent granted by Henry VIII. in 1505. In 1601 Queen Elizabeth revoked most of the patents monopolizing industrial produce. About this time (1600) Lord Dundas's alum works, at Whitby, were established. Alum always appears to have had much attraction for the monopolists, for in 1605 James I himself monopolized the manufacture of alum, tobacco, and finished cloth. Four years later, however, the monarch was compelled to revoke these patents.

The United States is notoriously the modern hot bed of trusts and pools. Their activity has become so irksome that several acts have been passed by Congress within the last four or five years to suppress them. The Sherman Anti-Trust Act is the principal one of these measures. All of them, however, when tested before the courts have proved inoperative. The Sugar Trust, one of the most notorious fleecers of the public, was prosecuted by the United States Government in 1892 for contravening the act, but the Government was completely worsted in the encounter. Since the passing of the Sherman Act, in fact, the formation of trusts appears to have increased more rapidly than before. A consular report from Philadelphia, which has just been issued, and which warns British investors against investing in any American undertakings of this kind, enumerates among the "Trusts" now in existence those "handling" glass, iron, iron ore, cordage, leather, cork, bread and still we believe that even such commodities as milk, shrimps, and ice-cream have been "pooled" in certain parts of America. That notorious footpad of industry, the Distilling and Cattle-feeding Company, better known as the Whisky Trust, which has long been the bane of the American drug trade, appears to have over stepped the latitude allowed even to an American exploiter, and is now being brought to book—not, however, by the authorities, but by private firms.

Although Mr. Jeans devotes a chapter to the function of the State in respect of "Trusts," he does not appear to possess any decided views as to what the nature of that function ought to be. It is indeed, difficult to offer a solution of the question. If it be at all possible to draw a line between the permissible and the non-allowable in the matter of combination, it would seem to lie in drawing the line at organizations operating in absolute necessities, such as staple food stuffs, iron or wool, and leaving those confining their business to other articles to fight their own battle with the consumer.

The Chemist and Druggist.

†"Trusts, Pools and Corners, as affecting commerce and Industry," by J. Stephen Jeans. London. Methuen & Co., 2s. 6d.

Dead Stock in a Drug Store.*

BY PROFESSOR W. M. SEARBY.

The pharmacist is a professional man, the druggist is a storekeeper and presumably a business man. Few men are so constituted either by nature or training as to combine both. Those very qualities which fit a person to become a pharmacist, seem, in the judgment of many, to be antagonistic to his ever becoming a successful trader. The nicety, the carefulness for minute detail, the exactness and slowness which become a habit to the

*Read at the recent semi-annual meeting of the alifornia Pharmaceutical Society.

chemist, conflict with the energy and dispatch necessary in business operations. The slow and thoughtful methods pursued in pharmacy, microscopy, and other studies that now form a part of the pharmacist's education, induce a habit that is unfavorable to the successful prosecution of trade. You can push trade, but you can't push chemical and microscopical operations. Patience, watchfulness, caution and scrupulous exactness are needed in pharmacy, but in business you need promptness, energy, decision, with some degree of diplomacy. Is it any wonder, then, that we rarely find all these qualities in any one man?

So well is the dual character of the apothecary of the nineteenth century understood in Great Britain, that he is there called a "chemist and druggist," the term *chemist* implying that he is a scientific man, while the word *druggist* indicates that he is a trader—a man who lives by buying and selling drugs.

On this side of the Atlantic we are no less traders than our brethren on the other side, but we are making far more strenuous efforts than they to be recognized as members of a profession. It is doubtful if we are any more entitled than they to be so considered. Indeed, it will not be many years before we shall be less entitled than they, if our colleges do not insist upon a higher grade of general education before matriculation; already, both in Great Britain and Canada, they are becoming more exacting than we in this particular.

I am an advocate for a more liberal scientific education of pharmacists, believing that it is only as we are superior in attainments to the average storekeeper that we can retain our hold upon the public, and claim from them the respect that is due to the profession of pharmacy; but at the same time I recognize the importance of a careful attention to the business end of the druggist's calling. The mere fact that we deal in drugs—that is to say, in goods which have such a slow sale that their very name is indicative of unsalableness—the mere fact, I say, that we deal in drugs, predisposes us to rest in undue content while we see the same old goods standing on our shelves from month to month, if not from year to year, with but little sale.

Had we been trained to handle other merchandise, we should chafe at the sight and take some steps to get rid of the dead stock which we now hold on to so complacently. My attention was brought to this matter a few days ago by the necessity of of making arrangements to place a new line of goods in some convenient part of the store. The idea naturally suggested itself to me to remove some of the dead stock to a less convenient part of the store; and when about to select the goods in question, I looked around to see what line of goods had the smallest sale in proportion to the room they occupied. It will, I am sure, surprise some of our members when I tell them that the articles that could with the greatest convenience be placed in a back room, where they would only be called for a few times in each month, were some of our oldest and staunchest friends, those which we have looked upon from our boyhood as the main source of the druggist's profit, namely, the pharmaceuticals and the crude and powdered drugs. Herbs have already long since been relegated to the privacy of the closet or store-room, but it seems almost a sacrilege to think that if a live business man should for a time take possession of a drug store, he might lay his unconsecrated hand upon the shop bottles containing powdered drugs, syrups, tincture and fluid extracts, and consign them to a subordinate place. One of the first provisions we make in fitting up our stores is for a certain amount of wide-mouthed bottles containing powdered drugs and chemicals. Many of these chemicals retain their hold upon the profession and are still used with sufficient frequency to warrant their retention on the front shelves, but powdered drugs are very little used and could just as well be in the back room. As for syrups, a few are used at the prescription counter, but how many of them are sold at retail? Where is the sense, therefore, in allowing them to occupy a prominent place in the store? Why not keep them behind the prescription counter, where they properly belong? The same may be said of tinctures. Any druggist can count on his fingers the number of tinctures which he is called upon to sell with any frequency. The rest, like the syrups, belong to the prescription counter. But even for this purpose they have been almost entirely superseded by fluid extracts, which in turn are rapidly giving place to the alkaloidal other active principles and the various forms in which concentration and convenience of dosage are provided.

Any pharmacist who will take the trouble to note the quantity of all the pharmaceutical preparations which he makes, with the date of their manufacture, will be surprised to find how seldom he makes such preparations as the tinctures of kino, columbo, cubeb, hyoscyamus, rhubarb, and twenty other tinctures that might be named. If he will note the value of all the tinctures in his store, and also note the amount of the same which he sells each month, he will come to the conclusion that about the deadest stock in his whole establishment is found in his tincture bottles.

I have thought this matter of sufficient importance to invite the attention of our members to it, and more particularly of the younger ones. If the conclusion at which I have arrived be correct, it is manifest that most of our stores are arranged to suit the business that was carried on a generation ago, and that the modern drug store should have fixtures and arrangements widely different. Indeed, were I to fit up a new store at the present time it would be altogether unlike any drug store I have ever seen, for I should make ample provision for many articles that are now crowded away in closets without sufficient room for convenient handling, and should reduce the space allotted to galenical preparations and powdered drugs to at least one-half of what they now occupy.

The question may be asked, if these galenical preparations, crude and powdered drugs, deserve to be assigned to such a subordinate position in a drug store, what preparations should take their place? This question must be answered by each man according to the business which he is doing; but, in a general way, I would suggest that many of the goods which we sell are unduly crowded in our cases and closets, lacking proper display, and so meeting with smaller sales than they would have is seen to better advantage. The newer pharmaceuticals, such as gelatin and sugar-coated pills, tablet triturates, hypodermic tablets, various forms of suppositories, bougies, etc, should be more conveniently placed, and even displayed. Much more room should be given to the storing and displaying of atomizers, syringes, inhalers, and all the modern appliances for medication. The pharmacists own preparations—legitimate pharmaceuticals, not quack medicines—should be displayed so as to attract attention and secure sales.

It is not necessary that I should pursue this matter further. My intention in preparing this paper was simply to call attention to the fact that times are changing, and in a certain sense we should change with them. Many remedies highly esteemed thirty years ago are fast going out of use; new remedies, and new forms of administering old ones, have come into use, and if we would keep up the business end of our calling as other traders do we should keep the new articles to the front, at least to a sufficient extent to show the public that we have new goods and that we are live business men. Having done this, I content myself with leaving this stray thought chiefly for the benefit of the younger members of our body.

[At the close of Professor Searby's paper the president remarked: "I was surprised the other day when a gentleman came into my place of business and called for Helmbold's Rose Wash, or Helmbold's Buchu, put up in the old style. I told him I had none. He said he would buy what I had, and give me a good price. Later he told me he had succeeded in buying some, and sold the proprietary stamp for $16. Some time after the war the Government issued a large number of revenue stamps for proprietary medicines, toilet articles, etc. Some fifty or sixty of the proprietary medicines had special stamps, and these are very valuable. They have a regular catalogue price. Anything over four cents is worth considerable money. I allude only to the Government proprietary stamp."]

Explosive Mixtures.

By SGANARELLE.

We are so frequently in receipt of complaints from our readers relating to explosions of mixtures that we think a few notes on some of the more frequently prescribed dangerous compounds may be of service.

POTASSIUM CHLORATE.—This is probably more often the cause of explosion than any other chemical which is handled by pharmacists. It should never be mixed in the powdered state with *organic substances;* even in very small traces in "saline" it is apt, after a time, if all the ingredients and the containing bottle is not absolutely dry, to burst the bottle and violently scatter the contents. It should never be mixed dry with *tannin.* Occasionally a gargle is ordered containing these ingredients; they should always be dissolved separately. *Hypophosphites* and chlorate similarly explode when mixed in the dry state. Chlorate of potassium and *glycerin* alone should never be dispensed, nor should it be combined with *sulphur* or the metallic sulphides.

PERMANGANATE OF POTASSIUM is another source of danger, for the same reason as chlorate, it so readily gives up its oxygen; consequently, it should not be mixed with any organic bodies, such as *sugar* or *glycerin*, nor with *spirit of wine* or spirituous preparations. When ordered in the form of pills, it should be massed with kaolin and petrolatum.

GLYCERIN, in addition to the cases above mentioned, should not be combined with chromic acid; nor with *borax* together with *alkaline carbonates.*

TURPENTINES AND VOLATILE OILS CONTAINING TERPENES should not be combined with *strong mineral acids,* nor with *iodine or bromine.*

IODINE should never be mixed in the free state with any preparations containing free ammonia, especially when *combined with fatty matter.*

OXIDE OF SILVER, sometimes ordered in the pilular form, should be massed with kaolin and petrolatum, and no *chloride* combined with it.

SPIRIT OF NITROUS ETHER frequently becomes very acid in keeping; in this state, when mixed with carbonates or bicarbonates, it liberates carbonic anhydride, and, if tightly corked, the bottle is frequently burst. Such a mixture should not be corked immediately after mixing. Excess of acid in the nitre may be removed by keeping a large crystal of sodium bicarbonate in the stock bottle, occasionally easing the stopper.—*British and Colonial Druggist.*

Shellac.

The features that make shellac varnish so suitable for foundation work are its quick drying properties, enabling it to dry on the surface of the work without sinking in, as a slower drying varnish necessarily would do, and thus be to a large extent lost; and next, its extraordinary tenacity to the surface below, and its affinity for the oil varnish usually placed over it. These qualities render it the only economical and perfect reliable first coating or priming varnish. Shellac is the generic name, popularly used, in speaking of the different forms of this gum. This is a mistake, however, as in the beginning it is known as lac or sticklac, and is the resinous exudation caused by the puncture of the coccus lacci upon the branches of certain trees—the ficus religiosi, or peppel tree, the croton lacciferan or bihar tree, the butea frondosa, and others which are found in several of the central and north-western provinces of India. This resinous exudation assumes the form of a crust encircling the twigs or extreme branches, sometimes to a thickness of upwards of half an inch. These twigs encircled with this substance constitute the sticklac of commerce. Certain localities produce finer grades of lac than others, and favorable or unfavorable seasons affect the crop as they would any other crop. There is a proper time for collecting this resinous incrustation also, a time when the coloring matter is at the minimum, and in order to get lac that will yield the finest grades of shellac this period must be carefully watched. As there are two evolutions of the insect annually, so there are two crops—one in March and the other in October. Occasionally, when the trees become exhausted, artificial propagation is resorted to. This is done by cutting twigs of the old trees and attaching them to fresh ones. Frequently, too, the insects are transferred by the feet of birds. The center of the shellac industry is Calcutta, where the sticklac is taken and ground into small pieces about the size of rice; it is then winnowed to free it from bark and seeds that have been detached by the process of grinding, and is now known as seed lac. The next operation is to remove the coloring matter of lac dye, which is done by adding water to the seed lac in earthen pans, the seed lac being kept agitated by women with their feet, much after the old-fashioned Scotch washing. The color is precipitated from the aqueous solution with lime and pressed into cakes, and is the lac dye of commerce. The gum is now dried, and again sifted and put into long, sausage-shaped bags, made of cloth. These are heated over a fire and the gum strained. Either by dextrous manipulation on the part of the natives, or by modern machinery of the European manufacturers, the strained gum, while hot, is formed at will into shellac, button lac, or short lac. The different brands are known by letters, which are the marks of the respective factories or packers, the most popular mark or brand being "D.C.," which is the product of the pioneer European factory.

Medical Notes.

The Constipation accompanying gout is best treated by the administration of colocynth, says Prof. Hare.

Consumption is believed by Dr. S. Solis-Cohen to be curable in the great majority of cases, if the patients are in a position to conform their mode of living to the required conditions.

Thermodin as an Antithermic.—Dr. Schmitt (*Sem. Med.*, 1894; XIV; p. 219) reports to have proved, by experimental and clinical researches, that thermodin is perfectly innocuous; it produces no gastric disturbance, cyanosis, or collapse, but, sometimes, sweats, or chills, which are, however, very slight. After a dose of 60 centigrammes (10 grn.) the abatement of the temperature hardly exceeds 0.9° C (1.6 F); after doses of 1 gramme (15 grn.), the average remission is 1.4 C (2.5 F). These effects, which, the author states, are obtained in influenza, tuberculosis, etc., are slowly produced but are durable.

Analgen in Influenza.—Fifteen patients suffering from influenza were treated by Dr. Goliner (*Aerztl. Parkt.*, 1894; VII; p. 362), with 0.5 grm. (7.5 grn.) doses of analgen every evening and morning until the nervous disturbances markedly receded. Only in very obstinate cases was the dose increased to 1 grm. A striking improvement is said to have occurred as early as on the second day, so that, in the author's opinion, analgen is an excellent nervine in influenza. Unpleasant by-effects were not observed; there were no respiratory or circulatory disturbances occasioned. The urine showed, after the use of ½ gme. of analgen, the well-known intense reddish-yellow to red coloration. As regards the proper dosage of analgen, the author states that the smallest single dose for adults is 0.5 gme. (7½ grn.), and the maximum, 1 gme. (15 grn.); the daily dose should not exceed 3 gme. (45 grn.)

Carbolic Acid and Chloroform in Enteric Fever.—Dr. R. Quill of the Indian Medical Service reports (*Lancet*) very favorable results from the use of the following combination :

Pure carbolic acid	M xxxvi
Spirit of chloroform	ʒ ij
Compound tincture of cardamom	ʒ iij
Syrup	ʒ ij
Chloroform water, sufficient to make	℥ xii

M. Sig. One ounce with an equal quantity of iced water every two hours as directed.

The treatment, if the case was admitted during the first week, consisted in the administration of three grains of calomel at bed-time, thrice repeated. Five doses of the mixture should be given every second hour on the first day, seven doses on the second day, ten doses on the third and following days, until a distinct improvement is observed in the general condition of the patient, with a fall of temperature. The doses then to be gradually reduced to seven, five, and three in the twenty-four hours, until the medicine is finally abandoned. If the mixture is given three to five times a day for a week after the temperature is reduced to normal, a relapse is not so apt to occur as when this is not done. The carbolic acid did not cause any ill-effects, although one patient took as much as two ounces, and another, one and a half.

Treatment of Mumps.—During a recent epidemic of mumps among soldiers, Dr. A. Martin (*Sem. Méd.*, 1894, xiv., p. 172) successfully resorted to the following treatment: From the outset he instituted buccal antisepsis, which, when rigorously done, according to his observations, diminishes the chances of testicular complication. He therefore had his patients gargle and cleanse the mouth as often as possible with solutions of thymol, carbolic acid, or very hot 4 per cent. boric-acid solution. Besides, during the first days of the disease he administered antipyrine in daily doses of 2–3 grammes (30–45 grains). This, he states, more rapidly effects the resolution of the inflammatory process than do sodium salicylate and other remedies; moreover, it acts more promptly on the fever and pain. In orchitis caused by mumps, pilocarpine subcutaneously in doses of 1 centigramme (⅙ grain), repeated once daily, is said to have promptly diminished the pain from the first evening on, and to have lowered the temperature, which became normal on the third day. The swelling of the testicle disappeared between the eighth and tenth days. After the acute period of orchitis was passed, the patient was submitted to a tonic treatment (cod-liver oil, nux vomica, cinchona extract, meat-powder, sulphur baths, etc.) for the purpose of preventing testicular atrophy.

Bottger-Almen's Method for Determination of Glucose in Urine. Dr. A. Daiber considers this the most satisfactory method now in use. The reagent employed is made as follows:

Sodio potassic tartrate....4 grammes [1 drachm]
Soda solution, 8 per cent..100 grammes [3 fl. oz.]

Bismuth subnitrate a sufficient quantity. Warm the solution and add the bismuth salt to the point of saturation.

About 20 drops of this reagent are added to 10 Cc. (about 2½ fl. drs.) of the urine to be examined, and the liquid is boiled for several minutes. If there is glucose in the urine, a dark yellow or yellowish-brown color will appear at first, which gradually darkens and finally becomes black and opaque. In case a minute quantity of sugar be present, the urine does not turn black,

but merely darkens. This bismuth test, as easy in application as it is simple, is very delicate, and will show reaction in urines containing but 0.05 per cent. glucose. Uric acid, kreatinin, mucus, and very small quantities of albumin do not react with this bismuth solution. Larger amounts of albumin produce, however, by the blackening of bismuth, an illusion avoidable by previous coagulation of the albumin. The presence of indoxyl-sulphuric acid —the so-called indican—is a disturbing factor in this reaction. When it is present more abundantly (which fact need, by no means, to be of any pathological significance), the capacity of reduction imparted to the urine will be vigorous enough to reduce the bismuth solution most energetically. The author enjoins, therefore, all those who investigate glucose with a bismuth solution, and have no polarizer, not to omit the fermenting test, if a reliable test is wanted. The presence of indican may readily be ascertained according to Jaffe's test,—HCl+urine+chloroform.

It remains to be mentioned that the uro-chloralic acid developed after chloral medication, also possesses a reduction power.

Growing Pains.—Growing pains, defined as pains in the limbs, caused by, and during rapid growth, and sometimes so severe as to give rise to growing fever, have been diagnosed by P. B. Bennie, M.D. (*Arch. of Ped.*, Vol. xi; 1894; p. 337), less and less frequently as the years rolled by, until the vanishing point was reached. Cases which have been classed together under this name are the following:

Myalgia from fatigue. This is the commonest variety, usually about the knees and ankles after unusual exertion. They are probably due to autoinfection brought about by excessive production of effete materials in the blood and their inefficient elimination. Elevation of the limbs and rubbing with the palm of the hand in a direction toward the heart relieving venous stasis and facilitating a supply of healthy blood to the exhausted muscles, promptly relieves the pain.

Rheumatism. This is second if not first in frequency. There is slight pain in the joints, little or no swelling and very mild fever, and hence the true cause is not recognized, but rheumatic endocarditis frequently develops in these cases.

Diseases of joints and bones of the lower extremeties. Cases of hip-joint disease and suppurative epiphysitis of the upper end of the fibula diagnosed by the laity and allowed to go on untreated are related under this heading.

Fevers, accompanied by pains in the limbs, in one instance proving to be inception of typhoid fever, constitute this class.

Adenitis. Here again the mother still supposes that the lad of 16 years suffered from "growing pains," but he was treated for gonorrhœa and a sympathetic bubo.

The malady "growing pains" with its frequent concomitant growing fever, like its congener disorders of dentition, as a separate morbid entity exists now principally as an article of faith. The complaint still maintains, however a strong hold of the lay mind and forms an extremely common lay diagnosis which is often the cause of much suffering and even death by leading to the neglect of curative measures at a time when they are most effective.

Salipyrin.

From the *Medical Record's* cabled report of the Eleventh International Medical Congress (Rome, March 29 to April 5), Section on Practical Medicine, we quote: Dr. Arthur Henning, of Königsberg, read a paper on this drug, which he believed to be the best antirheumatic and anti-neuralgic yet known, and also a most excellent antipyretic, especially in pediatric practice. In cases of rheumatism, when given in the early stages, it is most efficacious in relieving the pain and reducing the swelling of the affected parts. In simple colds and acute coryza it exerts a very favorable influence upon the headache and general malaise. Its action in influenza must be regarded as almost specific. In cases of uterine hemorrhage, not due to the presence of tumors, or occurring in childbirth, salipyrin is much more efficacious than any other known remedy. The drug is absolutely safe, and gives rise to no unpleasant after effects. It is best given in the afternoon, in rather large doses, repeated at short intervals. The total daily dose ranges from 7½ grains to 2 drachms, according to the age of the patient and the disease. The remedy has no cumulative effect, nor do those taking it acquire a habit.

A Contribution to the Study of Piperazine.

Dr. John Gordon, Professor of Materia Medica, University of Aberdeen, recently undertook a systematic study "to ascertain the solvent action of piperazine on uric acid," the expenses connected with the investigation being defrayed by the Scientific Grants Committee of the British Medical Association. Schering's piperazine was employed, Prof. Alexander Ogston furnished the supplies of calculi, and the investigation was made in the pharmacological laboratory of Prof. John Theodore Cash, F. R. S. The full report is published in the *British Medical Journal*, June 16, 1894, and is an important and highly interesting contribution, which will give the therapeutic adoption of piperazine a decided stimulus.

Dr. Gordon concludes his report with the following succinct summary:

As the result of numerous experiments on artificial uric acid, and also on aric acid which was collected from urine which had been treated with hydrochloride acid, it was found that piperazine was capable of dissolving almost its own weight in urine, after the phosphates had been removed; but when stronger solutions than 2.5 per cent. were employed, an insoluble precipitate formed.

SUMMARY OF RESULTS.

1. Piperazine is not wholly oxidized in the body, and may be detected in the urine of those to whom it is exhibited.

2. Piperazine in solution of 1 per cent. in normal urine, when kept in contact at a temperature of 39° C. (body temperature) for a given time, has the property of dissolving to a great extent a fragment of a uric acid calculus.

3. That the stronger the solution of piperazine in urine (up to 7.5 per cent.) the earlier did the solvent action begin, and the more rapid the completion.

4. That, notwithstanding this, with the stronger solutions of piperazine in urine, the rate of solubility was not so markedly rapid over the weaker solution as might be expected.

5. *That the solvent action of piperazine in similar circumstances was greater than any other of the substances that were employed*, viz., borax, lithium citrate, sodium carbonate and potassium citrate.

6. That piperazine, in weak and strong solutions in urine, converted the undissolved portion of the calculus into a soft granular or pulpy condition.

7. That neither borax, lithium citrate, sodium carbonate, nor potassium citrate in similar circumstances rendered the fragment of calculus soft or pulpy.

The report is made up in part by comparative tables of experiments, and these with the elucidating text form a complete and conclusive argument in favor of piperazine as an invaluable therapeutic agent in uric acid diathesis.

Medicine as Practiced by the Lower Animals.

It would seem as if man were surrounded by danger, seen and unseen, throughout his entire life. From the cradle to the grave it is a struggle. In the vegetable kingdom also the same struggle for existence is seen. Every flower has its destroying insect; for every shrub there is a worm, and for the ripening water melon the little colored boy lies in wait. But if disease threatens man on every hand, equally close at hand is the remedy with healing power, and not only do the so called inferior human races appear to recognize this, but even dumb animals, and it would seem as if the latter in an empirical way, of course, practiced medicine.

Animals instinctively choose such food as is best suited to them, and to a certain extent the human race also shows this instinct, and medical men are sometimes at fault in not paying sufficient respect to the likes and dislikes of their patients. Women, as a rule, are more often hungry than men, and they do not like the same kinds of food; nevertheless, men and women are generally put on precisely the same regimen, especially in public institutions. Infants scarcely weaned are given a diet suitable to adults, which they dislike, and which disagrees with them. Some years ago Delaunay investigated this question in the different asylums of Paris, and ascertained that children, although they will generally eat it, do not like meat before they are about five years of age. People who like salt, vinegar, etc., may generally be allowed to satisfy their tastes with moderation. Lorain always taught that, with regard to food, people's likings are the best guide.

A large number of animals, such as elephants, stags, birds, and ants, wash themselves and bathe. Delaunay lays down as a general rule that there is not a species of animals which voluntarily runs the risk of inhaling emanations arising from their own excrement.

If we turn to the question of reproduction, we find that all mammals suckle their young, keep them clean, wean them at the proper time, and educate them—maternal instincts which are frequently wanting or rudimentary in women even of civilized nations. In fact, man may often take a lesson in hygiene from the lower animals. Animals get rid of their

parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek darkness and airy places, drink water and sometimes even plunge into it.

When a dog has lost its appetite, it eats that species of grass known as dog's grass (*chiendent*), which acts as an emetic and purgative. Cats also eat grass. Sheep and cows, when ill, seek out certain herbs. When dogs are constipated they eat fatty substances, such as oils and butter, with avidity. The same instinct is observed among horses An animal suffering from chronic rheumatism always keeps as far as possible in the sun. The warrior ants have regularly organized ambulances. Latreille cut the antennæ of an ant, and other ants came and covered the wounded part with a transparent fluid secreted from their mouths. If a chimpanzee be wounded, it stops the bleeding by placing its hand on the wound or dressing it with leaves and grass. When an animal has a wounded leg or arm hanging on, it completes the amputation by means of its teeth.

What Gladstone Thinks of Doctors.

At a meeting held in London a few weeks since, for the purpose of creating some fitting memorial of the life and work of Sir Andrew Clark, Mr. Gladstone was the chief speaker. Among other appropriate things he said:

The profession itself is one with regard to which it is impossible, I think, not to be conscious that its position in our generation, and in some generations previous, has been a position continually advancing and continually widening. The other learned professions undoubtedly had a start of the medical profession. Four or five hundred years ago property was of more worth than human life, and physicians were little heard of. But the position of the medical profession to-day is becoming one of vital and commanding interest to the whole of society, and I anticipate that that interest must continue. While wealth increases, while inventions and discoveries increase, wants will increase and enjoyments will increase; and in connection with thoes wants and enjoyments there will, I fear, be a corresponding increase of infirmity and disease, and the medical profession braces itself to grapple with the situation which has been created, and continually advances in knowledge, credit and importance. My own life has been long enough to enable me to witness, and in some degree to measure, the change that has taken place I have had the good fortune of knowing many eminent and distinguished men in the profession during the last three-score years, and I have seen also a great change in capacity, in attainments, and in competency to deal with the difficult, the almost insoluble problems that are continually presenting themselves to the mind of the medical man.

It appears to me that it was eminently desirable that, in a time like this, a man such as Sir Andrew Clark should rise to the head of his profession. For, after all, we require something more than knowledge, something more than skill. We require great devotion to the purposes of the profession; and that devotion never, I think, was exemplified in a more remarkable manner than in the career of Sir Andrew Clark. He loved his profession with his whole heart and soul. While engaged in that profession he loved it not only with sincere and cordial but with chivalrous devotion. We need not say that the age of chivalry is altogether passed so long as we have among us men of the type of Sir Andrew Clark.

I think the profession has done well in taking by common consent Sir Andrew Clark as the typical man, the representative of all that is best and noblest in the profession and its purposes. Others may judge better than I can his scientific ability. What I have seen is his patience, his thoroughness, and his absorption in the care of his patient as if that one case was all with which he had to occupy his mind. I am sure that whatever happens; whatever may have been the past advances of the medical profession, and they are great; whatever may be the future advances of that profession, and they will be greater still, there will never come a time when the profession will not be justly satisfied and glad to have recorded upon its annals a name such as the name of Sir Andrew Clark.

Protection Against Mushroom Poisoning.

Dr. W. P. Gibbons of Alameda, Cal., the chairman of the committee on indigenous botany, materia medica, pharmacy, and medical chemistry of the Medical Society of the State of California, read at the recent meeting of that society a paper entitled "Some of the Poisonous Plants of the Pacific Coast." In that paper he showed that our American mushrooms were much neglected as an article of food and as a substitute for meat, owing to their bad reputation among those who were unable to discriminate between the edible and the noxious species. While, he said, there was no doubt that sickness and death had resulted from eating certain varieties, among the most poisonous of which he classed the *Amanita muscarius*, formerly used as a fly poison, such accidents were to be attributed as a general thing to gathering the mushrooms at an unseasonable time and to neglect of the proper precautions in preparing them for the table rather than to any fixed poisonous principle in the plant. Even the *Amanita muscarius*, he said, was eaten by the Russian peasants after they had prepared it with salt and vinegar. It appears, however, that it is not enough to be able to discriminate between the different varieties of fungi, for mushrooms that are in themselves innocuous are apt to be attacked by flies and other insects which impart poisonous properties to them. Dr. Gibbons showed a small bottle containing minute coleopterous insects and another containing myriads of their larvæ, not distinguishable by the unassisted eye from fine dust. These had been taken from a specimen of *Polyporus*. He concluded by stating that there was no general rule by which edible mushrooms could be distinguished from noxious ones; in all cases they should be well treated with salt and vinegar before being cooked.—*Editorial in N. Y. Medical Journal.*

Bibliography.

GRUDRISS DER PHARMAKOGNOSIE, von F. A. Flückiger, Zweite, mit Berücksichtigung technisch Wichtiger Pflanzen bearbeitete Auflage. Berlin: 1894. R. Gaertner's Verlagsbuch handlung.*

Flückiger's name and work is probably better known to the English speaking world than that of any other living German pharmaceutical writer, a fact which is in large measure due to his collaboration with Handbury in the writing of "Pharmacographia," though this alone would not have given him the high place which he holds in the estimation of the English and the Americans.

His most excellent work *Grundlagen der Pharmaceutischen waaren kunde*, in its revised and enlarged form, was placed before the English student as "the Principles of Pharmacognosy" in the translation by Prof. F. B. Power, and has proven of much value in systematizing the work of the students in learning the principles which underlie the systematic study of pharmacognosy.

Having mastered the "Principles of Pharmacognosy" the student is in a position to take up the *Grundriss der Pharmacognosie* which is more nearly the "ground plan" than the "elements" of pharmacognosy.

In this work, which is a duodecimo volume of some three hundred and odd pages, the author has arranged the more important organic drugs according to their botanical derivation, the comparatively small number of drugs of animal origin rendering any such classification impracticable as applied to them.

For instance, we find first the cryptogamous plants under which come (*a*) thallophytes and (*b*) pteridophytes. Next we find phanerogamous plants taken up and treated in the classes and orders to which they belong botanically, To facilitate cross references and comparative work a table of contents is furnished which is based upon the practical or external characteristics or commercial classes of the drugs, and under this we find the names of the various gums, roots, resins, etc., each giving a reference to the location of the subject matter in the body of the work.

The great advances in the technique of pharmacognosy of recent years renders it necessary for one to have special qualifications in that line to thoroughly comprehend all the technical expressions ,and descriptions used. With a view to widening the field of usefulness of the book, the author has therefore endeavored to avoid the purely scientific, taking up rather the practical aspect of the descriptions, tests, etc., as applied to the drugs treated of. Under the head "constituents," for instance, only those of importance are given those whose presence may be taken for granted, as cellulose, chlorophyl, albumen, starch and sugar, being generally omitted.

For the same reason that technicalities have been as far possible omitted, reference to the microscope and its revelations have been condensed to as little space as possible, and in most cases omitted altogether.

The general method pursued in the treatment resembles considerably that followed by Prof. Maisch in his "Organic Materia Medica," save that where Prof. Maisch gives the therapeutic properties Prof. Flückiger does not give these but does give brief mention of the history of the drug, the latter a thing to be expected in one of the authors of "Pharmacographia."

*Elementary Pharmacognosy, by F. A. Flückiger. Second edition prepared with especial regard to the plants of more importance Berlin: Published by R. Gaertner, 1894.

The similarity of scope and treatment of the work under review and that of the late Prof. Maisch cannot but invite critical comparison. Prof. Flückiger's work is written in smoother and less disjointed manner than Prof. Maisch's, but is still sufficiently concise. The method of classification adopted by Prof. Maisch, namely that founded on external similarities, is we believe preferable, although Prof. Flückiger states that he considers the arrangement by natural orders of most value to the student. (In his "*Pharmakognosie des Pflanzenreiches*," 3 *Auflage, Berlin*, 1891, Prof. Flückiger uses a similar method of classification to that adopted by Prof. Maisch.)

Prof. Maisch's book has also the great advantage over that under review that it is profusely illustrated, while the "*Grundriss der Pharmakognosie*" is entirely without illustrations.

The volume is a most excellent one as is to be expected, and should serve a valuable purpose to the German student. The appearance of the work at this juncture is particularly interesting in view of the author's presence in America.

A STANDARD DICTIONARY OF THE ENGLISH LANGUAGE upon original plans, etc. Prepared by more than two hundred specialists and other scholars under the supervision of Isaac K. Funk, D.D., Editor-in-Chief, Francis A. March, L.L.D., L.H.D., Consulting Editor, Daniel S. Gregory, D.D., Managing Editor, and Arthur E. Bostwick, Ph.D, John Derrickson Champlin, M. A., and Rossiter Johnson, Ph.D., L.L.D. Volume 1, A. to L. New York: Funk & Wagnall's Company, 1893.

This work combines in as high a degree as seems possible the advantages of the condensed arrangement of the old-style lexicon with that of the modern encyclopediac dictionary. By grouping the compound words under their respective roots, and giving to the roots themselves the fullest definition, it becomes possible to define the compound words very tersely yet very clearly, and thus to effect much economy of space. The work is especially rich in definitions of the vast number of technical words which have come into use in electrical science. It is a marvellously well conceived and well executed piece of lexicography, the scope and value of which it is difficult to realize save after constant use and careful study.

THE TANNINS. A monograph on the history, preparation, properties, methods of estimation, and uses of the vegetable astringents, with an index to the literature of the subject. By Henry Trimble, Ph.M., Professor of Analytical Chemistry in the Philadelphia College of Pharmacy, Vol. II. Price, $2. Philadelphia: J. B. Lippincott Company. 1894.

The second volume of this work is a worthy successor to that which preceded it, and reflects credit upon the ability of the author both as an original investigator and as an editor. The thoroughness and accuracy of the work in these two volumes leaves nothing to be desired.

FIFTH ANNUAL REPORT OF THE MISSOURI BOTANICAL GARDEN. St. Louis, Mo.: Published by the board of trustees. 1894.

This volume is unusually attractive, containing upwards of 40 handsome plates of exceptional value to botanists; its publication is a credit both to the board of trustees of the Missouri Botanical Garden and the city of St. Louis.

"*Well bought is half sold.*" *Read the "trade notes" and market review every issue.*

Correspondence.

"Observer's" Letter Criticised.

Editor AMERICAN DRUGGIST:

DEAR SIR: The last number of the AMERICAN DRUGGIST just to hand. I have read with interest your remarks on "University Schools," 'Ordo Rerum," and Redsecker's proposed act.

What prompts me to drop you these lines in the letter by "Observer," page 349, not that I wish to take a hand in the cutting cure problem, but that letter just reminds me of a little experience of a few Chicago brother druggists. "Observer" says "the American loves a bargain." Three of Chicago's best retailers had some experience throwing rather a queer side light on this assertion. These three large retailers, up to a certain time, had sold a leading article at full retail price. They concluded to make a leader, bought the popular article in gross lots, stacked her up in the show window, and lo! and behold! where a dozen a week had been sold before at full price, not a quarter dozen was sold a month at cut price, and the stock was peddled out to the retailers' friends at "liberal jobbers' discount." I just give this for what it is worth, and not with an idea to discuss the cut rate cure problems.

W. BODEMANN.

Chicago, Ill., July 3.

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Chemistry Chapter of the Agassiz Association.—F. H. writes for information concerning the above-named society, and we have obtained the following particulars from the secretary, Charles Schumann.

The object of our society is mutual assistance in the study of chemistry by means of correspondence. The members are scattered all over the United States. The "Note-book" circulates monthly, and serves as a club-hall for discussions, questions, etc. Members acquire practice in writing readable articles, and share the results of their studies by submitting brief essays quarterly. These essays are circulated with the note-book and discussed. A systematic course of home study, compiled with the assistance of some of the foremost chemists of the country, is provided by the Chapter for members desiring to avail themselves of its advantages. Members taking up the course are exempt from writing essays if desired. Students receive the aid of several chemists of high standing who are honorary members of the society.

Druggists who are preparing for board examinations can derive invaluable assistance by taking a one or two year's course of study in chemistry with the C. C. C. (Corresponding Chapter of Chemistry). College students will find the society a pleasant and useful auxiliary. Graduated pharmacists would find it an agreeable medium for the exchange of knowledge and experience.

[Dr. Marcus Benjamin of this city is honorary president of the Chapter. Those of our readers who may desire to become members of the Chapter may address the secretary in care of this journal.—ED.]

Brown Sequard's Epileptic Mixture. H. C.—The formula for this mixture is as follows:

Ammonia bromide	
Potassii	
Sodii bromide *aa*	℥ iii
Potassii iodidi	
Sodii iodidi *aa*	℥ iss
Ammonia carb	℥ I
Tinct. calumbæ	f ʒ iss
Aquæ ad	f ʒ viii

Fulminating Compound.—J. J. W. writes: Please inform me of some formula for making a torpedo-like explosive compound, that can be exploded by throwing it against a resisting object.

Among the substances most commonly employed by the makers of detonating crackers are fulminate of mercury and fulminate of silver. A small particle of the fulminate selected is screwed up in a piece of thin paper, with some fragments of a crushed quartz pebble.

Patent Leather Polish.—C. S. L. sends a sample of patent leather polish, with a request for its formula.

The composition appears to be a solution of yellow wax in turpentine, oil, and lard colored with lamp black.

Artificial Sea Salt.—M. C. asks for a formula for artificial sea salt.

A very good substitute for the genuine article is obtained as follows:

	Parts
Sodium chloride	800
Magnesium chloride	110
Calcium chloride	20
Magnesium sulphate	60
Potassium iodide	2
Potassium bromide	3

We think, however, that M. C. will find it more satisfactory to procure the natural sea salt from dealers in that article, as it is cheaper to purchase the salt than to manufacture it.

To Transfer Photographs.—R. R. W. asks for directions for transferring photographs from card on to glass.

Prepare the glass by coating its surface with dammar varnish; when the varnish is nearly firm and dry, place the previously wetted photograph carefully on it face down and rub it on, excluding air bubbles.

Lemon Kali.—L. S. C. This is a sweetened mixture of tartaric acid and bicarbonate of soda flavored with oil of lemon. It is much used in England and Scotland as a cheap substitute for lemonade. It is also largely employed by pharmacists in the countries named for the extemporaneous preparation of carbonated beverages. English pharmacists are not yet alive to the advantages of the soda fountain, and are still content to get along with bottled waters, so that when a customer de-

mands an effervescing sarsaparilla—for instance, they either uncork a bottle of the beverage and serve it as we would ginger ale, or they half fill a glass with plain water, add about an ounce of a syrupy decoction of sarsaparilla, and plunging a heaping desertspoonful of lemon kali into the mixture start a a brisk effervesence, and serve while effervescing. This is flavored soda water, as it is understood in England.

Lemon Kali is usually made as follows :

Sodium bicarbonate	4 ounces
Tartaric acid	4½ ounces
Powdered sugar	16 ounces
Oil of lemon	10 min.

Rub the oil with the sugar until entirely taken up ; then thoroughly incorporate the other ingredients, and pass the whole through a fine sieve.

Adhatoda Varica.—L. L. C. writes: "Adhatoda varica : a leaf, used to drive away flies either by odor or otherwise. Said to be obtainable through Parke, Davis & Co., though I find no mention of it in their catalogue.

"What sort of a leaf is it ?—what country, natural order, and how does it act ?"

This must be the *Justicia adhatoda* of Linnæus, an East Indian species of the Malabar nut tree (or shrub) belonging to the Nat., ord. Justiciæ. The leaf is aromatic and bitter. It is used by the natives in conjunction with other remedies as an anthelmintic, and their juice combined with that of fresh ginger in coughs, asthma and ague.

Injection Brou.—F. L.—This is stated to have the following composition:

Opium	
Catechu āā	15 grains
Saffron (Valencia)	30 grains
Water, enough to make	4½ fl. ounces

Macerate for several hours, then strain and dissolve in the liquid:

Lead acetate	45 grains
Zinc sulphate	90 grains

M.

Children's Tooth Powder.—C. H. asks for a formula for a safe children's tooth powder.

Next to camphorated chalk, which is the dentifrice best adapted for young persons and children, the following can be recommended :

Powd. cinchona	℥ ii
Potass. chlorate	℥ ss
Powdered orris	℥ ss
Precipitated chalk	℥ i
Otto of rose, sufficient to perfume.	

Mix and pass through a No. 80 sieve.

Imitation Raspberry Syrup.—C. L. B. asks for a formula for artificial raspberry syrup. She mentions that it is desired only for experimental purposes.

It is first necessary to prepare a raspberry essence of flavor and this is made as follows :

Orris root	3 ounces
Acetic acid	2 ounces
Acetic ether	1 ounce
Alcohol	20 ounces

Macerate the contused root with the other ingredients for seven days, then filter. In preparing raspberry syrup it is used in the following proportion. :

Simple syrup	7 pints
Water	2½ pints
Tartaric acid	2 ounces
Essence of raspberry	2 ounces

Cochineal coloring N. F. sufficient to impart the proper tint of color.

Tutti Frutti.—M. R. writes : I wish a formula for the chewing gum sold as Tutti Frutti. Can you favor me with a formula ?

The words "Tutti Frutti" are the trade-marked property of the concern making that particular kind of chewing gum. The composition of the gum is a trade secret, but it is said a preparation closely resembling it may be made according to the formula given below :

Chicle	3½ pounds
Paraffin wax	1 pound
Tolu balsam	2 ounces
Peru balsam	1 ounce

Dissolve the gum in as much water as it will take up, melt the paraffin, and mix all together. Now take:

Sugar, finely granulated	10 pounds
Glucose	4 pounds
Water	3 pints

Put the sugar and glucose in to the water, dissolve and boil them up to "crack" degree (confectioners' term); pour the syrup over an oiled slab, and turn into it sufficient of the above gum mixture to make it tough and plastic. The flavoring is said to consist of a mixture of powdered spices, but this may be best determined by experiment.

SODA WATER.*

WILLIAM B. THOMPSON, PH. G.

It is noticeable with what persistency we cling to the use of a misnomer when this becomes fixed in the mind. Take that of "soda water," for instance, as applied to the carbonated water, the aerated and the carbonic acid gas held in water, of the druggist's fountain ! So fixed an appurtenance of the drug store has this fountain adjunct become that it might be well to attempt, at least, to settle this title accurately and now.

The original soda water was really a medication, a draft of milder alkali to act as a calamative or "settler," or as a corrective of functional disturbance following some indiscreet feat gastronomic. It was merely a solution of bicarbonate of soda, thirty grains in a pint of water. Compared with the sparkle and cooling freshness of the modern draft, it would stand in about the same relation as soap and water to a foaming nectar, or of bubbling champagne to flat beer; and just how it became so mixed in name with its opposite, may be better guessed than understood. "Pulveris Effervescentes" might have fallen in with it somewhere along the line of march, and become mixed in the procession. *Mineral* water, which does seem more appropriate, though not applicable, was a term long in use. Years ago, before the tap on the counter of the drug store became extended or popular, or even used, Engene Roussell, then a well-known local manufacturer of ærated waters, established a "salle," or saloon, on Chestnut street, south side, above Third street, for the sale of *mineral* water on draught. Here, without show or pretense of any kind, over a marble counter, with a sunken basin of still water (perhaps drippings) he drew from one single plain stem the bubbling draught for thirsty hundreds. It was no unusual procedure at that time for Philadelphians to walk a mile or two of summer evenings to be regaled at this perennial fountain of delightful refreshment. Then came the era of mineral waters supplied to order—natural mineral waters bottled at the source, actually so, no doubt, in many cases; but we have had sufficient reason at subsequent times to believe actually *not so* in many other instances, and so on. This source of pleasure and means of revenue has become enlarged and expanded to that degree, that the modern (soda) fountain vies in artistic elaboration with the most fanciful creations of the artist in sculpture. Withal, that name of *soda* is still applied to the effervescent thirst-quencher, that struggles with the restraint of its marble encasement, until it leaps foaming into the goblet of the parched wayfarer and jaded pedestrian. Shall we continue, then, Mr. Editor, to call this delectable thing of such grateful refreshment, "soda water"?

*Alumni Report.

Summer Memoranda for Dispensers.*

BY THOMAS WARWICK.

There are three things which every confectioner should learn to manage—his wife, his mother-in-law and his soda-water counter; and of the three the latter is perhaps the hardest. I have known several cases of men who were able to manage their wives, and I heard of one case of a man who was able to manage his mother-in-law, although this case occurred very long ago and in some foreign country, but I never even heard of the case of a man who managed his soda-water counter in the way that would be necessary for obtaining the best results. There is still ample room for improvement in this respect, even among those who think they have attained perfection.

Of course, it is impossible to say much upon this subject in the limited space at my command, but I wish to touch upon a few of the points which are most commonly overlooked by the dispenser.

To begin with, there is the question of novelty. This applies as much to the apparatus as to the drinks dispensed. Every confectioner is familiar with the fact that while there are a few standard drinks which have a constant sale year in and year out, it is absolutely necessary to offer one or two novelties every season. Even those customers who do not call for the new drinks would leave your store if you did not advertise them. The title of the new drink seems to act upon the fizzophagous portion of the population in two ways. In the first place, it attracts them into the store, and, secondly, it makes them feel that you are up to the times. Hence, even though you may sell very few of the novelties, yet it is profitable to keep them on hand, as they increase the sale of the standard drinks.

But a point which is still recognized is the importance of frequently changing the appearance of the dispensing apparatus. A man who has a large trade is apt to imagine that his best plan is to buy a very fine apparatus and then keep this in his establishment for ten or fifteen years; but no greater mistake could be made. With very few exceptions the large bulk of any dispenser's soda water trade is done among a certain number of regular customers, and it is essential that the appearance of the soda water apparatus should not become too familiar to them. Progress of any kind implies change, and if they see no change in your store, they will imagine that you are unprogreasive, and will carry their patronage elsewhere. They do not reason the matter out in so many words, but feel it instinctively and act upon this feeling. Hence the wise confectioner will make occasional changes in his soda water counter.

*Confectioners' Journal.

I knew the case of a New Jersey man who used to make it a point to trade his dispensing apparatus for an entirely different one every spring; and although he was obliged to pay a difference of two or three hundred dollars each time he made the exchange, he nevertheless found the plan very profitable.

Of course, with a little ingenuity, it is possible to completely alter the appearance of the counter without buying a new apparatus, The mere change of its position in the store will often produce the same result, or the placing of statuettes or other ornaments around it.

For very large dispensers the question becomes a most difficult one, for it is exceedingly difficult to dispose of some of the mammoth marble structures which are to be found to-day in our large cities. For such, instead of purchasing a single large apparatus, I would recommend getting a number of separate medium sized wall apparatus, with plate-glass mirrors between them. The separate apparatus can then be readily disposed of for new ones of entirely different appearance at a comparatively small outlay.

An important question which arises, with large or even with medium sized apparatus, is how to prevent slopping up the floor behind the counter. I know of no satisfactory method of preventing this, for even if the greatest care be exercised, it is impossible not to wet the floor more or less. But what can and should be done in all establishments, and what is done in the best stores, is to employ some device which will prevent the water from leaking through the ceiling below, and at the same time allow the dispensers to keep their feet dry. The best plan which has come to my notice in this connection is that employed by some of the largest New York stores. They have behind the counter a water-tight lead-covered floor, inclined sufficiently to allow the water to run off into some convenient drain. Wooden racks are placed over the lead, so that the operators need not get their feet wet. These racks are not fastened down in any way, and they can therefore be readily removed when it is desired to sweep the floor. This seems to me about as convenient an arrangement as could be desired, and is withal, not very expensive.

Turning now to the drinks dispensed I wish to say a few words in regard to a drink which, it seems to me, does not receive the attention it deserves, although I must confess that its sale is increasing every year. This is what is known as soda lemonade or lemonade soda. It is really nothing more than the juice of a fresh lemon, mixed with a little simple syrup to sweeten it, and dispensed with a glass of plain soda. Yet it is one of the most healthful and refreshing drinks existing, and with a little judicious pushing its sale could be increased to an enormous extent. The value of lemon juice for refreshing the system is well known, and it is highly recommended by physicians in fevers and similar illnesses. Moreover, the carbonic acid gas itself possesses analogous properties, and the combination of the two makes an ideal summer drink. Consequently, if the confectioner is careful not to sweeten it too much, but to be sparing in the use of his simple syrup he will produce a drink that will quench the most insatiable thirst, and this is what few drinks will do. Most of the syruped soda waters, far from quenching thirst, really increase the thirst, but a well made soda lemonade goes to the right spot; and if people only realized this fact the sales of this beverage would increase to an astonishing extent. It is almost unnecessary to add that the lemons should be perfectly fresh A good way to keep lemons is to wrap them separately in tissue paper and suspend them in open wire baskets. A wooden or preferably a glass lemon squeezer should be used. Galvanized iron lemon squeezers should be, by all means, avoided, as the citric acid of the lemon forms poisonous compounds with the zinc. Porcelain lemon squeezers are good if the porcelain is not glazed with lead, which is, however, too often the case.

Another point which deserves mention is that of courtesy toward customers. There are a great many disagreeable people in this world, and they will often say or do things which are apt to irritate the confectioner's feelings, but he should school himself to avoid taking any notice of such rudeness. I do not wish to be understood as saying that a tradesmen should be obsequious, or that he should lack proper self-respect; but the mere fact that a customer is impudent or uneducated and says disagreeable things is no reason why the salesman should make a sharp or sarcastic retort. Remember that you are not responsible for the education of your customers, and that if they are badly brought up it is no fault of yours. But if you forget you are a gentleman, and try to answer sarcasm with sarcasm, you do no good whatever, and you lose a certain portion of your self-respect.

This question is often brought forcibly to my notice at the soda water counter. It is a wide-spread belief among the soda water drinking public that the dispenser, in order to make a large profit, draws each glassful of the beverage with as much foam as possible, in order to sell froth instead of soda water. There are, accordingly, quite a number of fair damsels who make it a point, after a glassful of the beverage has been served them, to let it stand on the counter until the froth settles in the hope of having it filled up again. The wise dispenser in all such cases will do well to make the best of a bad matter and refill the tumbler without waiting to be asked to do it. Of course, this acquiescence encourages the habit, but it pleases the customer, and the extra amount of soda water required is inappreciable.

I last summer witnessed an obstinate case of this kind, which I think worth recording, in the hope that other dispensers may profit by it. A young man had called for a glass of soda water, and when it was served out to him he let it stand awhile until the foam had settled. As the dispenser was industriously looking out of the window in order not to observe the diminution, the young man called to him, asking him to fill up the glass. Not caring to refuse, the knight of the draught arm acquiesced, but he had struck a tough customer, for the young man, instead of quaffing the beverage, let it stand again a few minutes and then coolly asked to fill up a second time.

This was too much for the dispenser, who curtly replied that he couldn't give three glasses of soda-water for five cents.

"Oh, never mind that," replied the customer. "I'm willing to pay ten or fifteen cents to get a good glassful."

"Well, even so, I can't do it," returned the confectioner, "for it's against our rules to take more than five cents for each glassful."

The angry customer dropped a dime on the counter and went out without touching the soda-water, but he never set foot in that store again.

The majority of the people who were in the store at the time sympathized with the dispenser, and he really could not be blamed for his conduct. But I, nevertheless, felt that he had made a mistake in refusing to fill up the tumbler again. There are fortunately not many such disagreeable customers, and it seems to me better to be willing to lose something on these than to have any unpleasantnes arise in the establishment. If the same man repeats the practice too often it is time then to try to put a stop to the matter; but it is well to endure such things as long as possible.

In recommending this course it is not the mere question of profit that is to be considered, for the rule does not apply only to a tradesman selling goods, but in all branches of public and private life. The rule is this: "Never be too quick to take an offense, and always try to be conciliating in manner, even if you have to sacrifice some of your own rights and liberties." Life will be much pleasanter and you will, curiously enough, get more than the man who is all the time claiming his full share, and who always shows fight at the least infringement of his rights.

In concluding this article I wish to give advice in regard to two other points. The first is to use side-opening cocks on your portable fountains. The top-opening cocks are more apt to break off, but, above all things, they are more difficult to get under the counter, and the counter requires to be made higher. Hence the side-opening cocks are greatly to be preferred.

Secondly, I would advise all dispensers, except in the very smallest establishments, to use what is known as a multiple valve or duplex cock. This is a device by means of which an empty fountain may be shut off and a full one turned on without an instant's delay, and without having to dive under the counter. The mere turning of a stop cock accomplishes the desired result.

Contracts in Restraint of Trade.

In purchasing the good will of an established business it is the general rule to include a provision that the seller shall not engage in the same or similar business within the territory covered by the business sold. This is a fair contract, and if properly made, an entirely valid one; but it is somewhat technical in nature, and may very easily be rendered invalid by reason of the introduction of stipulations which the law regards as unconscionable, and therefore void.

The general rule is that all restraints of trade, which the law so much abhors, if they are pure and simple restraints of trade, unqualified and unlimited, and without a special and valid consideration, are bad, and will not be enforced. Any agreement in general restraint of trade is void and illegal. The law will not permit a man to enter into a contract which will wholly deprive him of his established means of livelihoood, and take his producing capacity out of the general fund of the community. To permit this would be to encourage inactivity, stifle competition, restrict production and increase poverty. Any contract therefore by which a man agrees not to employ his industry, his talents or his capital in any useful vocation or business is void, unless it is limited either as to time or place, and is entered into for a valid consideration.

It frequently happens that individual interest and general convenience render engagements not to carry on trade, or to

act in a profession in a particular place, proper. Upon this phase of the question a great many cases have arisen out of the sale of an established business, and not a few out of contracts of employment. It frequently happens that a merchant desires to employ a salesman, upon condition that he will not enter the same business on his own account, or enter the service of a competitor. Properly limited this species of contract is valid. If the contract is that the employee shall not do these things within a specified time, and the time is reasonable, or that he shall not do them within the territory covered by the employer's trade, the agreement, if upon a proper consideration, is valid and binding.

In addition to requiring that the restraint must be partial and founded upon consideration, the agreement must be reasonable. The best test of the reasonableness of such an agreement is whether the restraint is such only as to afford a fair protection to the interest of the party in favor of whom it is given, and not so large as to interfere with the interests of the public. Whatever restraint is larger than the necessary protection of the party can be of no benefit to either; it can only be oppressive, and if oppressive it is in the eye of the law unreasonable. Whatever is injurious to the interest of the public is void, on the grounds of public policy, and no certain precise boundary within which the restraint would be reasonable, and beyond which excessive, can be laid down. Contracts for the partial restraint of trade are in fact in many cases beneficial to the public; and in the case of the tradesman selling his shop with a contract not to carry on the trade in the same place, which is in effect the sale of a good will, which offers an encouragement to trade by allowing a party to dispose of all the fruits of his industry, and also that of a manufacturer or professional man taking an assistant into his service with a stipulation that he shall not carry on the same business within certain limits. In such a case the public derives an advantage in the unrestrained choice which such a stipulation gives to the employer of able assistants, and the security which it affords that the employer will not withold from the employee instruction in the secrets of his trade and the communication of his own skill and experience, from the fear of his afterward having a rival in the same business. If the law discouraged such agreements as these employers would be extremely scrupulous as to engaging employees in a confidential capacity, seeing that such employees might incur the risk of taking advantage of the knowledge they acquired of their customers and their mode of conducting business, and then transferring their services to a rival trader.

It is highly important that persons like a commercial traveler should be able to enter into contracts of this sort, which afford some security to their employers that the knowledge acquired in their service will not be used to their prejudice. Under the same head as contracts in restraint of trade may be classed those by which the services of individuals are secured for a specified time, or for life, to a particular employer. There seems to be no objection to such contracts, even when they extend over the whole period of the life of the employee, though in some countries a restraint so extensive has been considered inconsistent with individual liberty, and accordingly forbidden. The question, however, appears to have been long ago settled in our law without regard to considerations which seem to embrace a shadow.—*American Stationer.*

Microscopical Manipulation.

Snowflake Pictures.—Anthony's *Bulletin* says that a Mr. Sigson has photographed snowflakes as follows: A Zeiss microscope, fitted to a long camera, was placed at a considerable angle in the attic of a house, near to the window. To gather the flakes separately, a thick cloth was laid in that part of the window where but few flakes fell. After selecting a flake by the aid of the microscope, it was placed in a net made by gumming cotton thread across a hole cut in a card, this card being placed in position under the microscope. The lighting should be from the side, and should be arranged beforehand, so that half of the field is lighted. With a magnification of 15 times, an exposure of 2 to 5 seconds was found necessary. To prevent the snowflake being melted by the breath of the operator breathing must be carried on through a curved tube.

Aniline Stains may be removed from the skin by acid or hypochlorite, but the better mode is to wash first with a 5 per cent solution of sodium chloride, then with hydrogen peroxide and finally to rub with a cloth moistened with alcohol.

Ringing Mounts.—For ringing mounts there is nothing neater, cleaner or more convenient for use than liquid shellac. Use the liquid pure without any admixture whatever. While the slide is upon the turn-table apply the liquid with a fine brush and finish with the point of a knife blade. Rings thus finished look almost as if made of solid glass. If a fancy mount is desired, paint a design on the slide and run the ring over it, as above. These rings make a handsome finish, which every one will admire. One can prepare the liquid himself. It may be obtained at a varnish factory or procured from dealers in microscopic supplies.

Bleaching Animals and Sections Fixed with Osmic Mixture.—Dr. Carazzi, of the Spezia Civil Museum, gives the following "oxygenated-water method" for getting rid of the blackening caused by osmic acid treatment.

The peroxide of hydrogen becomes reduced at contact with organic matter, and this is bleached by the oxygen. But the oxygenated water is very unstable and in a short time the peroxide of hydrogen is converted into water. By the chlorine method, heat was necessary and it has an injurious effect upon the tissues.

The difficulties are obviated by the peroxide of sodium method. The compound is a yellowish powder; when put in water oxygen is evolved and the liquid becomes alkaline. But if the water is mixed with acid the liquid remains neutral, because the soda combines with the acid.

Large quantities of peroxide must not be put in a small quantity of water, nor mineral acids be used, otherwise a violent reaction is set up, oxygen being evolved in large amount and the molecules of powder being thrown all around.

The acids more convenient for use are tartaric and acetic. For bleaching, use the following: Put a solution of tartaric or acetic acid (10 per cent) in a vessel if for animals, and in a test tube if for microscopical sections, sink a small quantity of the peroxide, add slowly 70 per cent alcohol at the surface of the water put in the object. The oxygen escapes from the water, rises quickly to the level of separation of the two liquids and dissolves in the alcohol, slowly bleaching the specimen which is supported in the alcohol.

**Microscopical Journal.*

Student's Column.

Organic Materia Medica of the U. S. P.

[*Continued from Page 350.*]

Benzoinum. Benzoin; gum benjamin.

BOTANICAL NAME.....Styrax Benzoin.
NATURAL ORDER.....Styraceæ.
HABITAT.....Borneo, Java and Sumatra.
CONSTITUENTS.....Several resins, trace of volatile oil, 12 to 20 per cent. of benzoic acid, cinnamic acid.
PROPERTIES.....Stimulant and expectorant in catarrhal affections.
PARTS USED.....The resinous exudation from the stem.

Dose—Tinct. Cc. 2—4 **Tinct. benzoin Co.** Cc 2—4; also as application to indolent sores.

Bryonia. Bryonia; bryony.

BOTANICAL NAME.....Bryonia alba and bryonia Dioica.
NATURAL ORDER.....Cucurbitaceæ.
HABITAT.....Europe.
CONSTITUENTS.....Bitter principle bryonin), starch, gum, sugar, albumin.
PROPERTIES.....Drastic purgative and diuretic.
PARTS USED.....The dried root.

Dose—Tinct. Cc 1—4.

Buchu. Buchu; buchu leaves.

BOTANICAL NAME.....Barosma betulina and barosma crenulata.
NATURAL ORDER.....Rutaceæ.
HABITAT.....Southern portion of Africa, Cape Colony.
CONSTITUENTS.....Volatile oil (½ to 1.63 per cent.), stearopten (diosphenol), resinous, gummy and coloring matters,
PROPERTIES.....Stimulant in catarrh of the bladder and diseases of the urinary organs.
PARTS USED.....The dried leaves.

Dose—Ext. fld. Cc. 1.20—2.00.

Calamus. Calamus; sweet flag.

BOTANICAL NAME.....Acorus calamus.
NATURAL ORDER.....Aroideæ.
HABITAT.....North America, Northern Asia; cultivated in Burmah and Ceylon.
CONSTITUENTS.....Volatile oil, bitter principle (acorin), starch, gum, soft resin, cellulose.
PROPERTIES.....Aromatic stimulant.
PARTS USED.....The dried rhizome.

Dose—Ext. fld. Cc. 0.60—1.30.

Calendula. Calendula; marigold.

BOTANICAL NAME.....Calendula officinalis.
NATURAL ORDER.....Compositæ.
HABITAT.....Southern Europe and the Levant; cultivated in the United States.
CONSTITUENTS.....Amorphous bitter principle and calendulin
PROPERTIES.....Supposed stimulant and resolvent; sedative to cancerous ulcers.
PARTS USED.....The unexpanded flowers.

Dose—Tinct. applied externally.

Calumba, Calumba; columbo.

BOTANICAL NAME.....Jateorhiza palmata.
NATURAL ORDER.....Menispermaceæ.
HABITAT.....Forests of Mozambique in Eastern Africa; enters commerce from Zanzibar or through Bombay.
CONSTITUENTS.....Columbin $C_{42}H_{17}NO_4$; starch, pectin, gum, yellow resin.
PROPERTIES.....Bitter stomachic tonic.
PARTS USED.....The dried and sliced root.

Dose—Ext. fld. Cc. 4 in watery dilution; **Tinct.** Cc. 4—8.

Cambogia. Gamboge.

BOTANICAL NAME.....Garcinia Hanburii.
NATURAL ORDER.....Guttiferæ.
HABITAT.....Siam, Cambodia, and Cochin China.
CONSTITUENTS.....Resin (Cambogic acid), gummy matter.
PROPERTIES.....Drastic and hydragogue cathartic,
PARTS USED.....The gum resin.

Dose—Gm. 0.06—0.30.

Camphor. Camphor; gum camphor.

BOTANICAL NAME.....Cinnamomum Camphora.
NATURAL ORDER.....Laurineæ.
HABITAT.....China and Japan, chiefly in Island of Formosa; cultivated in Florida.
CONSTITUENTS.....
PROPERTIES.....Stimulant, sedative, antispasmodic.
PART USED.....The concrete volatile oil.

Dose—Aqua, Cc. 16; **Spirit** Cc. 0.30—2. Extern. 2pp. **Linim** (1 in 5); **Lin. Saponis** (1 in 20, about).

(*To be Continued.*)

Written for the American Druggist and Pharmaceutical Record.

A PRACTICAL DRUGGIST'S ADVERTISING.

By A. J. Embree.

Belton, Texas.

Let me say before I write a single line that I believe in printers' ink to the very core; no advertising can be beneficial without an abundance of this. As to the way of using printers' ink: I would first get me a good location in the paper or papers in which I expected to place my matter, preferably adjoining the local column, and if I could not get this space I should procure the space nearest the local column, say about five or six inches double column or 10 inches single column. You might change from one to the other occasionally—"variety is the spice of life." Variety in advertising is noticeable—that is, a change of space, the size and shape, not the location. Keep your ad. always in the same location, for your readers will become accustomed to look in this place for your ad. Now, since you have gotten them to look for your space, the next thing to do is to put something in that space that will hold their attention. My idea of doing this is to have illustrations, small ones, in the body of your ad. or in the corner if you please, just so it is something that will attract attention. Let it be a comical or catchy illustration; I inclose a few which I have used very effectively. I have an outfit and do my own engraving, which reduces my expenses in that line to a minimum, and at the same time I get larger space for a less amount of money than I could if I had my ads. set up in type, because I knock the compositor out of a small job.

One ad.—"The Two Johns,"—has been running in our daily paper, and is a very good one, from the fact that J. C. Stewart's "Two Johns,"—a theatrical company—played here the next week and had billed the city thoroughly. This, of course, made the ad. very effective, and everybody noticed it when they read the paper, and this is what we put ads. in the paper for, you know.

I make a run on fishing tackle every spring, and it is done simply by using printers' ink judiciously.

Never allow an ad. to run over one time in your weekly, and change every day in your daily if you can find the time to attend to it. You must attend to your advertising if you wish to do business; my advice to business men who have not the time to attend to their ads. is to some get advertisement writer to do it for him, as it will pay him. There are several good writers in New York who can attend to this at a nominal cost; there is Mr. Bates, Mr. Scarboro, Mr. Moses and others who can do you good work.

Little local lines in connection with display ads. are very good indeed—they are good feeders for the displays. Occasionally you can find a good novelty which can be used very beneficially. The key and tag device is a good one; it emanates from Boston, and there are others that are equally as good. I trust these little suggestions will serve a good end; especially do I trust that they will bring trade to you as they have to me.

HOLD ON! Stop!!!
IF YOUR LEG or any
Member of your body PAINS
you—GO TO EMBREE'S
Drug • Store • FOR
ALL KINDS OF LINIMENTS
Bring your FAMILY RECIPES
EMBREE can fill them
WITH PURE DRUGS

Designed by A. J. Embree, Belton, Texas. Reproduced by Henry Kahrs, New York.

"WHITE ON BLACK."

Mr. A. J. Embree of Belton, Texas, is doing some very effective advertising for his drug business, by a sense of quaint illustrations in the local press. These illustrations are printed from plates which he makes himself, and show the drawing and reading matter in white while the background is black.

There is really nothing new in this idea. Such plates and cuts have been used from the beginning of the art of printing, and were either engraved with tools, etched with acids, or in recent times, produced by the aid of photography.

All of these methods, however, were costly, and called for technical skill on the part of the engraver. We understand, however, that Mr. Embree produces his plates by a simple process recently invented by Mr. Henry Kahrs of 240 East 33d street, New York City, in which the elements of time in making and cost are reduced to a minimum. Briefly stated the plates are made by taking a sheet of thick, smooth cardboard, somewhat larger than the plate to be made and drawing the design upon it with a special ink furnished for the purpose, and in the manner described in the instructions sent to those who wish to use the process. When the drawing or writing is finished, it is heated to drive off the moisture, and then a cast is made from it in an ordinary stereotype casting-box, exactly in the same way as if the card-board with the drawing on it were an ordinary papier maché matrix. The writing or drawing will be found depressed into or hollowed out of the plate, and this when printed from will show white lines on a black ground. The whole operation should not take more than ten minutes after the drawing is done. The card-

board represents the chief cost for material (leaving the metal out of the question, as that may be remelted and used over again). The advantages of of the process are apparent. The advertiser can make his own plates at home cheaply and quickly; he can change his advertisements frequently, grasp novel features and make use of them at once, and even if he is no artist he can make up ads. that people must notice, and "sometimes a striking advertisement, even if crude in design, is a better fetcher than an art study."

A Pretty Window Experiment.

Prepare a small beaker or jar full of cold saturated solution of Glauber's salt, and into the solution suspend by means of threads a kidney bean and a non-porous body such as a marble, stone, piece of glass or other suitable material. Now cover the jar, and in a short time there will be seen radiating from the bean small crystals of sulphate of soda, which will increase and give the bean the aspect of a sea-urchin, while the non-porous body remains untouched. The bean appears to have a special partiality for the crystals, which is due in fact to the absorption of water by the bean, but not of the salt. In this way a super-saturated solution is formed in the immediate neighborhood of the bean, and the crystals, in forming, attach themselves to its surface.

A Novel Device.

W. P. Draper, a druggist of Springfield, Me., recently drew considerable attention to his store by distributing what appeared to be walnuts. These when opened were found to contain a roll of paper advertising several of Mr. Draper's specialties, and also a diminutive bottle of perfumery.

Nathan G. Bubier, a pharmacist of Lynn, Mass., contributes the following to *Printers' Ink*:

Not long ago I noticed the following in the window of a Salem druggist. The display was of nursing bottles, with complete fittings:

GIVE THE LITTLE SUCKERS
A CHANCE.
TWENTY-FIVE CENTS.

It is perhaps needless to say that the ad "caught the town."

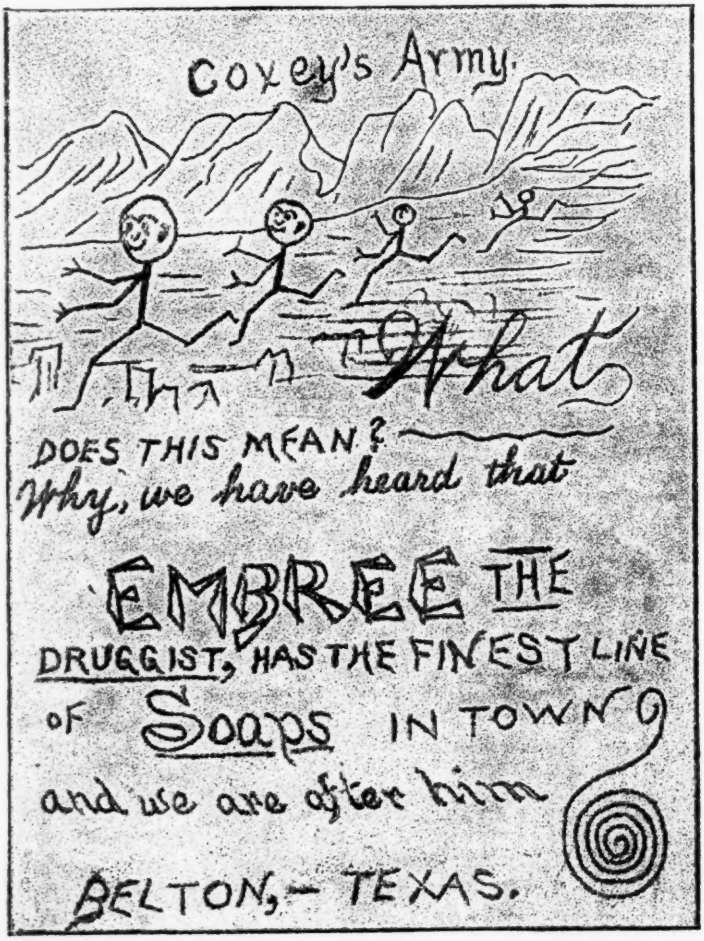
Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the second issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the *entire* series of questions as published from July 10 to December 25 1894.



Designed by A. J. EMBREE, Belton, Texas. Executed by HENRY KAHRS, New York.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home Study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Answers to Questions; Thirteenth Series.

141. If a twig from an elm or willow tree be cut across and examined, we shall find at its center, a cylindrical mass of pith and next to this a tube or sheath (medullary sheath) and then one or more tubes of wood, outside of all a cover of bark. Each year a new ring of bark and a new layer of wood will be added, this method of growth, from the center outward is called exogenous.

Endogens have no true bark, no true wood, a stem almost unbranched, there is no cambium layer. The leaves are parallel veined, its flowers are three parted, its seed has but one seed leaf or cotyledon.

Exogens have a pith, a medullary sheath, layers of heart and sap wood, a bark of three layers, they increase annually by the addition of rings of woody tissue, the leaves are net veined, flowers mostly five parted and seeds have two cotyledons.

If we examine the stem of a banana we shall find the entire center composed of a pithy material covered by a tough fibrous rind. Running through this pulp, from bottom to top, are bundles of fibrous tissue. At some points the fibres bend out and go to the rind, forming part of it, and again, higher up, this same fibre returns to the center and unites with the bundle it had previously left There are no distinctions of bark and wood and the plant literally grows from within and is called an endogen.

142. In many orders of phanerogams, tissues are found whose component elements contain a milky or colored fluid. To those, although varying greatly in structure and position, the general name of laticiferous tissue, or ducts, has been given. Two general forms may be distinguished.

(1) That composed of simple or branching elements, which are scattered through the other tissues. As found in Euphorbiaceæ, where they occur in paranchyma, they are somewhat simply branched and have very thick walls. In other orders they are thin-walled and are sometimes inclined to anastomose. From their position it is quite certain that the elements of this form of laticiferous tissue frequently replace bast fibres. In such cases they are said to be metamorphosed bast fibres; in other cases, however, they appear not to be of this nature, but to arise from the parenchyma by the absorption of the horizontal partition walls.

(2) The other form is that composed of reticulately anastomosing vessels. Here the tissue is the result of the fusion of great numbers of short cells. The walls are thin and often irregular in outline. In Cichoriaceæ, this form of laticiferous duct is very perfectly developed as a constituent part of the phloëm portion of the fibro-vascular bundles.

The composition of the latex is usually water (with or without an organic acid), albumen, wax resin, gum, sugar, and ash. The walls of the laticiferous elements are composed of cellulose. Opium and rubber are the product of laticiferous ducts.

143. The cambium layer is a mass of narrow, somewhat elongated, thin-walled cells, lying on the outer side of the tracheary tissue, between the phloëm and xylem, forming what is called the *open* bundle. These cells are filled with protoplasma, or formative matter. The function of the cambium layers is the formation of new bundles and tissues, inner and outer. The cambium is thus the formative layer in exogens.

144. The chief coloring matter of leaves is chlorophyll, the exact chemical composition of which is not definitely known, but it probably contains carbon, hydrogen, nitrogen, and oxygen, and there is good reason for believing, some iron. It is believed to contain two coloring principles, one yellow, the other blue; in the autumn the blue color fades and leaves the yellow.

145. Sclerenchymatous tissue—The hard parts of plants, composed of cells whose walls are thickened often to a very considerable extent. The cells are usually short, but in some cases they are greatly elongated; sometimes regular in outline, but more frequently they are extremely irregular, They do not contain chlorophyll, but in some cases starch.

Parenchymatous tissue is the most abundant of tissues in the vegetable kingdom; it is at once the most important and the most variable. It is usually composed of cells whose walls are thin, colorless, or nearly so, and transparent; in outline they may be rounded, cubical, polyhedial, pusmatic, cylindrical, tabular, stellate and many other forms. When the cells are bounded by plane surfaces generally, but not always, the end planes lie at right angles to the longer axis of the cells. This tissue makes up the whole substance of many of the lower plants.

In the higher plants the essential portions of the assimilative, vegetative—(growing)—and reproductive parts are composed of parenclymatous tissue.

146. The terms division, class, genus and species are used in botany to identify a particular plant from all others. We first divide the great vegetable kingdom into two sub-kingdoms. The plants which produce flowers and seed are put into the first of these, and are called Phanerogamia. The others are assigned to the Cryptogamia. Sub-kingdom I. is again divided into three classes: Angiosperms, seeds enclosed in a cover or pericarp and having two cotyledons. Gymnosperms, seeds naked or having no pericarp. Monocotyledons, plants having embryo with one seed leaf. Sub-kingdom II is divided into six classes:

1. Pteridophyta; ferns.
2. Bryophyta; mosses.
3. Carposporaæ; toad stools.
4. Oosporeæ; some sea weeds.
5. Zygosporeæ; moulds.
6. Protophyta; yeast and bacteria.

These classes are then divided into numerous orders, which include all genera having close relationship; thus we put into the same order the apple and the rose, since it is evident they are related forms.

Orders are again divided into genera, which are composed of species nearly related. The flowers which are alike in stem, leaves, flower and fruit, and must therefore have originated from a common parent, are assigned to the same species. A slight modification of a species is called a variety.

There is a considerable difference in classification, as given by different authors.

147. The official name, botanical name, habitat, principle constituents and part used of the plants of the order Umbelliferæ are as follows:

Ammoniacum, dorema ammoniacum, Persia. Volatile oil, gum, resin. Part used, gum-resin.

Anisum, pimpenella anisum, Europe and China. Volatile oil. Part used, fruit.

Asafœtida, ferula fœtida, Afghanistan. Volatile oil, resin, gum, ferulic acid. Part used, gum-resin.

Carum, carum carvi, England and Germany. Volatile oil. Part used, fruit.

Conium, conium maculatum, Britain. Conine. Part used, leaves.

Coriandrum, coriandrum sativum, Britain. Volatile oil. Part used, fruit.

Fœniculum, fœniculum capillaceum, Malta. Volatile oil. Part used, fruit.

149. Botanical substances contained in compound cathartic pills:

Exogonium purga, Vera Cruz. Part used, resin jalapin.

Garcinia hanburii, China. Part used, resin.

Citrullus colocynthus, North Africa to Morocco, Egypt, Nubia. Part used, extract of fruit.

Aloe socotrina, Isle of Socotra. Part used, juice of leaves.

Eletaria cardamomum, East Indies. Part used, fruit.

Convolvulus scammonia, Asia Minor. Part used, resin.

150. The order Hydrophyllaceæ is not represented in the U. S. Pharmacopœia. The plants belonging to this order are for the most part showy garden plants.

Names of Students Whose Grade Stood 75 on the 13th Series.

E. Q. Anewalt, Philadelphia.
James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wiconisco, Pa. T. H. Brenneman, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponsten, S. Dak. G. E. Barkesdale, Richmond, Va.
Miss Maude Florence Cain, Lancaster, Pa.
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centreville, Tenn.
H. J. Force, Newark, N. J.
William E Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavalle, Gouverneur, N. Y.
C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centreville, Tenn.
W. B. Nethery, Toronto Junction, Ont.
Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala.
A. V. Rand, Wolfville, N. S.
Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snavely, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.
Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.
W. H. Van Strander, Winsted, Conn.
Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N.Y.
Miss Emma A. Wiggin, Exeter, N. H.

Questions; First Series.

MATERIA MEDICA.

References: Maisch's Materia Medica, U. S. Dispensatory, National Dispensatory, U. S. Pharmacopœia, and Oldberg's Home Study of Pharmacy.

1. Name two monocotyledonous roots used in medicine.

2. Name and briefly describe two fleshy medicinal dicotyledonous roots free from starch and inulin.

3. Name and briefly describe three fleshy, medicinal dicotyledonous roots free from starch but containing inulin.

4. Name and briefly describe two fleshy medicinal dicotyledonous roots containing starch and with laticiferous vessels in the bark.

5. Name and briefly describe one fleshy medicinal dicotylodenous root containing starch with radiating rows of resin cells in bark.

6. Name and briefly describe a fleshy tuberous dicotytedonous medicinal root containing starch with resin cells *not* radiating.

7. Name and briefly describe a woody, medicinal, dicotyledonous root with wood firm and medullary rays narrow and with *sweet* taste.

8. Name and briefly describe a woody medicinal, dicotyledonous root with wood firm and medullary rays narrow and with *bitter* nauseating taste.

9. Name and briefly describe a woody, medicinal dicotyledonous root with wood firm and medullary rays narrow and with bitter *aromatic* taste.

10. Name and briefly describe a woody, medicinal dicotyledonous root with wood firm and medullary rays narrow and with *astringent* taste.

Phosphorus Butter.—M. Comby proposes the following modification of Trousseau's for the preparation of an iodo-phosphorated butter which may be used as a substitute for cod liver oil in hot weather

Fresh butter	17½ ounces
Potassium iodide	4 grains
Potassium bromide	15 grains
Sodium chloride	2 drams
Phosphorus	¼ grain

About a third of an ounce is to be taken daily, spread on bread.

Insect Lotion.—The *Presse Medicale* gives the following formula:

	Parts
Strong ammonia water	30
Collodion	10
Salicylic acid	1

A drop of the solution to be applied to each bite.

New York State Pharmaceutical Association.

SIXTEENTH ANNUAL CONVENTION.

The proceedings of the sixteenth convention opened in the reading-room of the United States Hotel, Saratoga Springs, N. Y., on Tuesday, June 26, at 12 noon, with C. A. Rano, president, in the chair. Mr. Rano introduced C. W. Mitchell, the president of the village of Saratoga, who delivered an address of welcome. He had anticipated with interest and pleasure the arrival of the members, and proceeded to read a prescription which he said he would like the members to compound and take *secundum arte*. Saratoga was Nature's laboratory. More opportunities existed in Saratoga for spending an enjoyable vacation than in many other places that could be named. The prescription he proposed was a pleasant one, consisting of plentiful doses of Saratoga scenery, Saratoga spring water, etc etc.

Dr. Gregory responded to the address of welcome as follows:

MR. PRESIDENT, LADIES AND GENTLEMEN:—I had wondered all the way why our president had been so solicitous for my welfare. I could scarcely pass to the end of the car without his following me to see that I did not fall off the platform, and when we disembarked at Albany I noticed that he had a string tied to me.

I could not quite understand the reason until this moment, but I see now that it was because he wished me to act as his spokesman.

It gives me great pleasure, even though I have been corralled, to respond to this address of welcome. We will endeavor to enjoy the climate which our friend assures us they have in very large variety and quantity. I am sure that the climate is at the present moment more enjoyable than that which I left at home. We will endeavor also to enjoy the water of which he spoke. Some of us have already imbibed it in large quantities. We will try to take in the various forms of entertainment which all presented to us, our desire also being to avoid being taken in. I think we shall have to spend a few hours possibly in going to that historic spot, Mt. McGregor, where the great hero of this country died, and there pay our tribute of respect to his memory. We will also ride upon the waters of your far-famed lake, and if the exhilirating character of the Spring water is such that it shall not restrain our movements so that we are able to get away in health and safety, we shall be anxious to come again.

I thank you in behalf of the Association. I thank the citizens for whom you speak for the welcome extended to us.

Secretary Holmes then read several letters of invitation from the proprietors of mineral springs. The firms who so courteously placed their springs and property at the disposal of the pharmacists included the Congress Springs, Hathorn Springs, and Saratoga Vichy Springs. The proprietor of the Fort William Henry Hotel invited the members to visit Lake George. The invitation included free fishing and boating on the lake, followed by a luncheon on the hotel grounds. The invitation bore the signature of Macdonald & Co., owners.

Dr. Huested moved that the communication be placed on file and the invitation accepted with thanks.

At this point the Secretary announced that owing to illness and other causes no member of the executive committee was present.

President Rano moved that two members be selected from those in attendance to act *pro tem*, and Secretary Holmes was empowered to nominate. The following were selected: W. L. Rogers, W. L. Dubois.

A committee on credentials was then appointed after which the president's address was read as follows:

GENTLEMEN OF THE ASSOCIATION:—Before entering upon the business relating to the condition, prosperity and prospects of this association, I desire first to express my great appreciation of the distinguished honor you have conferred upon me by election to the highest office within your gift, and to sincerely thank my fellow-officers for their considerate kindness and co-operation. While mourning the loss of two of our beloved members, let us also express gratitude for our continuous blessings of life and health that so many members of this association are enabled to meet in this beautiful place to exchange greetings at this, our sixteenth annual reunion.

Pursuant to time-honored customs it becomes my duty at this time to review in general the affairs of the association during the past year, and make such suggestions for the future as may in my opinion be for its usefulness. The general depression in business that has existed throughout the entire country since our last meeting has been felt in our profession.

Although the practice of pharmacy has not been as remunerative during the past year as usual, no doubt trade has held its own with all mercantile pursuits.

On May 4, 1804, Willard N. Smith died at Clifton Springs. Mr. Smith was elected a member in 1880, and bore an excellent reputation among his neighbors for competence in his business and integrity in his private life.

I have recently learned of the death of Charles R. Paddock, of Brooklyn. Mr. Paddock was elected a member in 1885. I respectfully suggest suitable obituaries be prepared for them and published in the proceedings.

The result of the adoption of the recommendations of the committee on the advancement of the affairs of the association at the last annual meeting has met with unqualified success. The society is to be congratulated upon securing Prof. H. H. Rusby to deliver an address.

Professor Rusby is one of the leading scientists of this country. His lecture will be not only entertaining but exceedingly instructive.

The committee on commercial interests was placed in charge of Clark S. Ingraham, chairman, with an able corps of assistants representing each county in the State.

The chairman, possessed of unusual executive ability, has made so great a success of this work as was possible in the present financial condition of the country. In spite of the efforts of this committee ruinous cutting exists in certain parts of the State to such an alarming extent, leading proprietary medicines are sold at retail for less than wholesale cost price. It is to be hoped the committee will be able to suggest some method which may be the means of restoring prices in all parts of the State.

The report of the first year's work will be of great interest.

Every pharmacist will look forward to the result of the action begun by John D. Parke against the National Wholesale Druggists' Association on account of having been placed on the cut-off list. The determination of this suit may decide the future action of many leading manufacturers of proprietary medicines.

During the last session of the legislature the following bills, each of which were inimical to the interests of pharmacists, were introduced. Senate bill No. 709, Assembly bill No. 115, and the Southworth bill to regulate the sale of proprietary medicines.

Senate bill No. 709, to regulate the sale of opium, chloral and cocaine, was introduced by Senator Saxton upon request of Mrs. M. T. Burt, pres. W. C. T. U., and had the support of that association, contrary to a promise made to the committee on legislation by Mrs. Burt at Lakewood last year that no bills would be presented to the Legislature affecting the sale of opium, chloral or cocaine, through the efforts of the W. C. T. U., without submitting the same to your committee. The bil was presented without consultation and justly met with defeat, not having been reported from committee.

CHAS. F. FISH.

President-Elect of the New York State Pharmaceutical Association.

Charles Frederick Fish, the newly-elected president of the New York State Pharmaceutical Association, comes of old New England stock, his parents being natives of Connecticut of Yankee extraction. He was born in the village of Saratoga Springs, August 16, 1845. When 22 years old he became a partner in the business which his father established in 1840. The firm name was then changed from Geo. H. Fish to Geo. H. Fish & Son. This name was continued until after the death of his father in 1884, since which he has conducted the business under his own name. Mr. Fish is one of the original members of the State Association, and assisted materially toward its organization. His membership in the A. P. A. dates back to 1866. When the Association met in Saratoga in 1880 he was chosen local secretary. He has not been without honor in his own country, for the villagers have more than once selected him for local offices. The last official position held by him was that of President of the Board of Education. His election to the office of the President of the State Pharmaceutical Association is an honor worthily conferred, and in thus honoring Mr. Fish the Association has undoubtedly added to the lustre of its own glory.

CHAS. O. RANO.

Retiring President of the New York State Pharmaceutical Association.

It seems probable in the near future a change will be made in that section of the Criminal Code relating to prescriptions containing opium, chloral and cocaine. There is a glowing feeling among many people that too few restrictions are required in dispensing these articles. I would recommend that the legislative committee draft suitable amendments to the present law, and submit same at next session of the association for approval and presentation to the legislature.

Assembly bill No. 115, requiring poisonous substances in liquid form to be dispensed in fluted bottles. This bill passed the Assembly and was defeated in the Senate. There seems to be a demand for a suitable "poison bottle."

The Douglas bill was too sweeping in its conditions and not practicable. A bill defining the shape and color of a bottle for poisons, and defintively stating what should and what should not be dispensed in it, would seem to be a proper amendment to the Criminal Code.

The bill to regulate the sale of proprietary medicines, after being presented and referred, died in committee. The bill did not meet the approval of the manufacturers of proprietary medicines nor the opponents. The requirement of having the precise composition of each proprietary medicine upon the label is a matter of serious consideration at your hands.

I desire to call the attention of the association to the increased rate of tax on distilled spirits as proposed in bill H. R. 4864 known as the Wilson Tariff bill now pending in U. S. Senate. The present tax on distilled spirits is 90c. per proof gallon on alcohol.

The proposed rate of duty on distilled spirits is $1.10 per proof gallon, $2.68 per gallon on alcohol.

I would suggest pronounced action be taken by the association against any increased rate of tax on distilled spirits.

I will conclude with the expression of a hope that this meeting may be crowned with highest success, and the new departure of the association prove to be of lasting benefit.

On motion of Mr. Holmes the address was referred to a committee composed of Dr. A B. Huested, E. A. Harvey and Chas. H. Butler.

A letter was read from the Secretary of the New York County Branch of the Interstate Retail Druggists' League, in which it was stated that delegates from the Branch would be present to secure for therecently adopted resolution concerning petrolatum products the endorsement of the State association. The communication was ordered tabled to await the appearance of the delegates.

Secretary Holmes presented his annual report for 1893.

The report was ordered printed.

The treasurer was next heard from, and his report indicated that the treasury was in a fairly flourishing condition The report was on motion referred to the executive committee.

After some discussion it was moved that the citizens of Saratoga be invited to attend Dr. Rusby's lecture on Wednesday evening.

The forenoon session was brought to a close with a short address by C. F. Fish, local secretary and chairman of the committee on entertainment, who outlined the various entertainments provided.

The afternoon session opened at half past three o'clock, with W. H. Rogers in the chair.

The committee on president's address reported in the various recommendations contained therein, as follows:

Regarding the proposed increase of tax on alcohol the committee offered the following resolution:

Resolved, That as an association we emphatically condemn the proposed increase of tax on alcohol as unjust to the large number of people who are obliged to use it for proper and legitimate purposes, and as amedicinal agent.

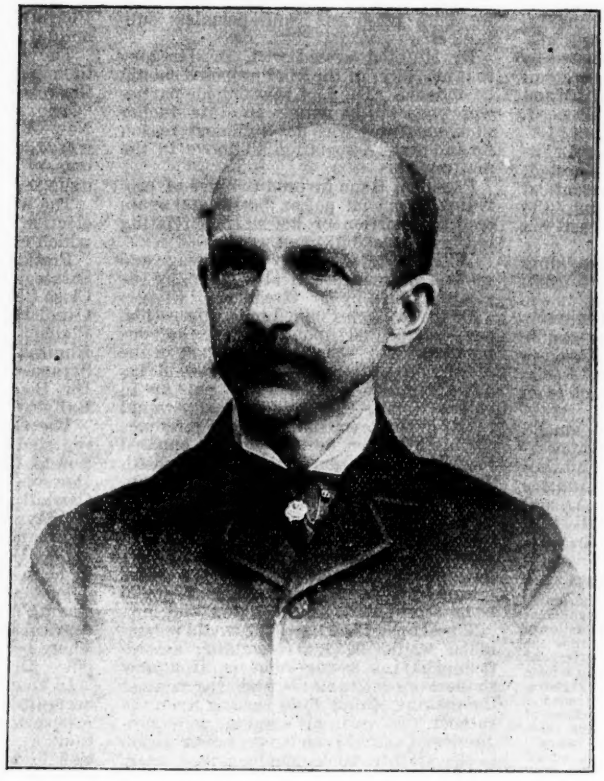
An amendment to this resolution, moving that the secretary of the association be empowered to take the steps necessary to bring the action taken to the notice of the proper authorities, was adopted.

In reference to the president's recommendation that the legislation committee be instructed to draft a bill proposing suitable amendments to the present laws governing the sale of opium, cocaine and chloral, the committee stated that a proper law for regulating the sale of those articles is not easily drafted. The matter had been under consideration by members of the association for two years, and they seem to be unable to devise or propose a satisfactory law.

It would seem, therefore, that if anything is to be accomplished in this direction, it would be better that a special committee on this subject be appointed.

In the discussion which followed, Mr. Rano moved that the appointing of such a committee be referred to the incoming president after his election and installation. R. R. Smither, of Buffalo, will probably be requested to draft the bill, as he is believed to be best fitted for the task.

The fourth recommendation of the president is a most important one, and the committee, composed of Dr. A B. Huested, E. A. Harvey and Charles H. Butler, reported as follows:



CLAY W. HOLMES.

The alert looking gentleman whose features are delineated above is so well known to the pharmacists of this State from his connection with the State Association since its organization in 1879, as to scarcely require word of mention here With J. A. Miller of the Pennsylvania Association, he shares the distinction of being the oldest secretary in point of service, of any association secretary in the United States. Clay W. Holmes was born in Le Raysville, Penn., Sept 26, 1848. In 1861 he attended a private school at Troy, Pa. In 1862 he entered the Susquehanna Collegiate Institute at Towanda, Pa., where he remained two years. In 1864 he entered the advanced class of Cortland Academy at Homer, N. Y. In the fall of 1865, at the age of 16, he entered Lafayette College as a freshman. During the second term senior, being then in his twentieth year, a telegram came announcing the death of his father at his home in Elmira, N. Y.

The loss of his father made it necesssary to forego the expense of graduation exercises. Entering a drug store, he pursued at the same time the study of medicine. In the fall of 1869 he entered the University of Pennsylvania and attended the course of medical lectures; but abandoned the idea of graduating as a physician before the commencement of the second term. Early in 1871 the position of manager of a store in Wilkesbarre, Pa., was tendered and at once accepted. In November of the samc year he was married and took up his residence there. In June, 1872, the position was given up and he opened a drug store on his own account. The venture was immediately successful. January 1, 1878, he sold out and returned to Elmira, buying a half interest in a retail drug store. In 1881 the retail business was dropped and an exclusively wholesale and manufacturing business opened. This was successful. In 1885 the store was burned out. Heavy losses reduced him to first principles. With no capital except willing hands, a manufacturing business was started, soon devoted exclusively to the manufacture of one specialty, which was from the first a flattering success, and has a universal sale throughout the United States and Canada. In January 1889 he was appointed general manager of the Elmira *Advertiser*, which a position he still holds. Mr. Holmes is held in deservedly high estimation by everyone connected with the different boards and associations of the State, as he is always ready and willing to be of service to his friends in the craft. By many he is looked upon as the watch-dog of the State association, and his devotion to its affairs certainly affords some justification for the title.

To Regulate the Sale of Proprietary Medicines.

With reference to the matter of a law compelling the publication of the composition of all secret or proprietary medicines upon the bottle or package containing the same, your committee are in full accord, and would recommend that a bill containing such provisions be directed to be drafted by the Legislation Committee and presented to the next legislature, and urged to its passage.

The Secretary here made announcement that the Massachusetts Pharmaceutical Association was now in session, and suggested that a telegram of congratulation be sent. It was so-ordered.

The report of the committee on new remedies, J. H. Hutchins, New York city, chairman, was read by title. Mr. Holmes explained that the report was an especially valuable one, and its compilation must have entailed unusual labor.

On motion the association passed a special vote of thanks to Mr. Hutchins, as a token of their appreciation of the excellent character of the report.

The report of the committee on sixty was then presented. This report shows the status of affairs relating to the organization of the drug trade of the State.

Refering to this report the secretary said:

"I would, as chairman of this committee, recommend that the committee of sixty be maintained as it is organized, that is, one committeeman selected from each county of the State *who will communicate with the chairman*, thus keeping in touch with all parts of the State, but that no further appropriations be made for the purpose of trying to organize the counties as long as the counties manifest no deslre to be organized, or to act with the State Association in trying to promote the fraternal and commercial relations of our brethren throughout the State."

Twelve names were proposed for membership and posted for action at a subsequent session.

Communications from the president of the New England Drug Union and G. W. Ostrander were received and referred to the proper committees. After transacting sundry other routine business the first day's session was concluded and the association adjourned to meet on the following morning at 11 o'clock.

In the evening the members visited the famous reproduction of a Pompeiian mansion, known as the "House of Pausa." Here they were met by Franklin W. Smith, who delivered a most entertaining lecture descriptive of the house and its antiquities. Mr. Smith proved an enthusiast of the most ardent description. It was impossible to resist the charm of his delivery and manners as he portrayed the customs of the Ancient Romans It was altogether a delightful experience for every one who participated.

The first session on Wednesday was opened at 12.20 P M. by President Rano. After reading the minutes of the previous meeting, the secretary announced the following nominations to membership:

Frank E Mitchell, Ballston; Dr. A. B. Brundage. Brooklyn; Martin Van Emery, Buffalo; Henry D. Deuchler. Buffalo; Ed. Villars, Carthage; Edward Sayer, Cornith; W. E. Baldwin, Glen Falls; John B. Dixon, Hornersville; Geo. H. Bancroft, L. A. McGraw, Geo. E. Heuther, Thomas J. Keenan, Alfred Hy. Mason, New York City; Francis Tucker, Sandy Creek; Charles C. Strong, Oswego.

Upon motion duly seconded, Mr. Dubois was instructed to cast one affirmative ballot for the names proposed, after which formality the nominees were declared duly elected members of the Association.

The Committee on Adulteration presented a valuable and interesting report on the adulterations and sophistications of drugs which had come under their observation during the interval subsequent to the last meeting. In addition to this the report contains reference to the composition of various widely advertised nostrums. Its value was fully appreciated by the Association, and a unanimous vote of thanks was tendered to the Committee and the report ordered printed in the proceedings of the Association. (See page 12)

The report of the Committee on Legislation was made by Dr. A. B. Huested. Six measures affecting pharmaceutical interests had been introduced into the State Legislation during the past six months.

On Jan. 11, the Douglas bill, providing for a special poison bottle, was heard from, when it passed to a third reading in the Senate. The measure was criticised as sweeping in its conclusions, and impossible from simple econom c reasons. Through well directed efforts of the State Association the bill was never reported back from the Assembly.

On February 16, a measure to amend the state pharmacy law made its appearance in the state assembly. It did not meet with the approval of the committee on legislation of the N. Y. S. P. A., and the veto of the Governor was all that prevented it from becoming law. In vetoing the proposed measure, Governor Flower expressed himself as follows:

This bill amends sections 184 and 187 of the public health law. The general object of the amendment to section 184 is to enable persons who have failed to apply for their licenses as pharmacists within the time prescribed to make application hereafter, and also to correct a clerical error in the existing section by changing the word "resignation" to "registration." The only amendment apparently intended to be made to section 187 was to correct the spelling of the word "peppermint," and another clerical error is made in the bill by changing the word "usual" to "unusual," so as to permit the sale of unusual domestic remedies by retail druggists in the rural districts without license as pharmacists, and to prohibit the sale by them of usual remedies. The new clerical error is more serious than the clerical error which the bill undertakes to correct and the measure ought not to be approved in its present shape.

Senator Saxton's bill to regulate the sale of opium, chloral, and cocaine, which was introduced at the instance of the President of The Women's Christian Temperance Union on March 8, met with the same fate.

Several Excise measures affecting pharmacists had received the attention of the committee, and those deemed likely to prove injurious opposed.

The report proved very interesting and a long discussion ensued.

Two subjects of the report were of special importance and deserved consideration. The first was that dealing with the passage of a law to provide for the dispensing of poisons in bottles of special design. The question of how best to increase the income of the State Board is of great importance. The Board is at present much hampered in its operations by a lack of funds, the registration fees alone having been found insufficient to defray necessary expenses.

President Rano directed attention to the important character of the suggestions contained in the report of the Committee, and invited the members to discuss them freely.

Dr. Willis G. Gregory said he did not see much merit in a measure looking to the dispensing of poisons in fluted bottles. If he were a bottle manufacturer it might be different. He was opposed to giving the matter any consideration, as he thought safety in dispensing poisons would be best secured by making dispensers feel their own responsibility. No matter how much ingenuity might be displayed in designing a poison bottle, the container would ultimately lose its distinctive character and come to be used without discrimination as a receptacle for both poisonous and harmless substances.

Dr. Huested agreed with Dr. Gregory that measures of the kind proposed should be opposed. The fact that outside parties were constantly active in introducing such measures was not sufficient reason for the State Association to move in the matter.

President Rano favored the idea of providing an official poison bottle, and again read that portion of his address relating to the Douglas bill.

W. H. Rogers took up the passage and spoke against it, practically endorsing the position taken by Dr. Gregory.

Dr. R. G. Eccles joined in the discussion, and commented upon the fact that one point had not been touched upon in the discussion. The public would soon become familiar with poisons put up in colored bottles, and the familiarity would result in carelessness. Without reference to this, however, he was utterly opposed to special legislation of the kind proposed. Too much law in his opinion bred anarchy, and he very convincingly demonstrated the soundness of his logic by setting up an imaginary case where a merchant encompassed by too many laws but faithful in their observance is easily beaten by a business rival who happens to be less scrupulous in observing the law.

The shape of the bottle he would recommend would be one resembling an old-fashioned ink bottle—that is, if a new shape were desirable; but he was against the making of new laws bearing upon the subject. Laws, in his opinion, were productive of anarchy, and every new addition to the statute books made a new anarchist.

Alfred Hy. Mason said he thought the suggestion of procuring special legislation against the dispensing of poisons in other than bottles of a special design a weakone.

No one had ever yet been able to prevent accidental poisoning. The old method provided for the use of a red label; but the public must be educated up to the exercise of care. He had heard of a bottle so constructed that its usefulness was destroyed by the mere act of opening it. This was obtained by shaping the neck in such a way as to render it impossible to empty the bottle without breaking it.

Geo. Kempton suggested the use of a specially designed label. Such a device, he said, had been in use for some time by one of his acquaintances, and he was favorably impressed with its utility.

Dr. Willis G. Gregory moved that the association place itself on record as being opposed to any legislation of the character of that proposed, and after a short discussion, in which Dr. Eccles took part, a motion to that effect was drawn up and adopted unanimously.

Dr. Huested then read that portion of his report dealing with the proposed pharmacy law. He reviewed the position taken by him and his associates with reference to the matter, and went over the ground reviewed by His Excellency Governor Flower, which we quote elsewhere.

After appointing a committee of three to select names for presentation to the Governor to fill vacancies on the Board of Pharmacy; and a committee of three to consider place of next meeting the convention adjourned until evening.

The association re convened late on Wednesday evening, President Rano occupying the chair. After moving a special vote of thanks to the Committee on Adulterations, which was adopted with acclamation, the secretary read a telegram of greeting from the Massachusetts Pharmaceutical Association then in annual convention at Worcester.

The reading of scientific papers was then taken up, and the secretary announced the reading by title of a paper read on "Ordo Rerum" by Thomas J. Keenan, New York City. On motion the paper was ordered to be printed in the proceedings of the Association. (See our last issue.)

The association then proceeded to the election of officers for the ensuing year which resulted as follows:

President, Charles Frederick Fish, Saratoga Springs; vice-presidents, Isaac Close Chapman, Newburgh; L. A. Baker, Cambridge; E. Sanford Gregory, Fort Plains; Secretary, Clay W. Holmes, Elmira; Treasurer, William B. Fuller, Syracuse; Executive Committee, W. L. Du Bois, Catskill; Willis G. Gregory, Buffalo; Clark S. Ingraham, Elmira.

The Committee on Board of Pharmacy reported the following names for presentation to the Governor for election: E. S. Dawson, Jr., Syracuse; W. L. DuBois, Catskill; W. H. Rogers, Middletown; C. B. Sayre, Auburn; Geo. E. Burrows, Chatham.

Clay W. Holmes placed Dr. R. G. Eccles' name in nomination for chairman of the delegates from the N. Y. S. P. A. to the coming meeting of the American Pharmaceutical Association at Asheville, N. C. There being no other nominations for the office, Dr. Eccles was duly elected.

In view of the difficulty which regularly accredited delegates of State associations experience in obtaining proper recognition at annual meetings of the National organization, Dr. Eccles considered it would be well for the New York State Association to request the A. P. A. to only acknowledge in its nominating committees, duly accredited delegates from State associations. He offered the following resolution which was adopted by unanimous consent:

Resolved, That the New York State Pharmaceutical Association requests the American Pharmaceutical Association to only acknowledge in its nominating committees duly accredited delegates from State associations except in such States as have no such association or as have not sent such delegates.

Dr. Gregory reported for the committee on place of next meeting. Saratoga Springs was named first, Catskills Mountain House next. Saratoga was selected by ballot.

The matter of increasing the efficiency of the State Board by increasing its sources of revenue was then taken up. Two methods of bringing about an increase in funds were proposed—re-registration and raising of the examination fee. On motion of Mr. Rano the consideration of this matter was deferred.

E. S. Dawson, Jr., Secretary of the State Board of Pharmacy, said he had received a communication from Geo. W. Ostrander, in which the Board was arraigned for many sins of omission. It was Mr. Ostrander's opinion that the pharmacist of the State had received no benefit from the enactment of a pharmacy law.

Mr. Dawson admitted the truth of a number of Mr. Ostrander's assertions, and said the law itself was at fault, as under the present act it was next to impossible to secure evidence or even witnesses of infraction of the law. If the Association could suggest any method by which the work of the Board could be facilitated, it would be welcomed.

Continuing, he said it was discouraging work trying to get up complaints against offenders. He had approached some of the officers of the Association for assistance at different times, but had been told invariably that it was no concern of theirs. This was one of the discouragements he had met with in attempts to enforce the law. He said the Board cannot compel a witness to give evidence. Complaints received bore invariably the riders, "please don't use my name."

Secretary Holmes suggested giving the Board the power of a court of inquiry to summon witnesses, and secure evidence in that way.

President Rano stated it as the result of his experience on the Erie County Board, that he thought one Board could not do proper justice to the territory covered. Better results might be had were the authority divided. At present the State Board has supervision over about 59 counties, which was too much for one Board to look after.

Referring to the remarks of Mr. Dawson, Mr. Holmes said he received annually many communications relative to State Board matters, which it was his custom to refer immediately to the Secretary of the Board. He spoke of the law governing pharmacy in Quebec, contrasting it with the law presently in force in this state. All that is required to practise pharmacy in this state is a fee of $5, and a certificate of proficiency. He considered a change necessary. The Board of Pharmacy of the State of New York can no more exist without money than any other Board. He was in favor of a yearly renewal of license, and thought there should be a close relation between the Association and the Board. There should be some provision made whereby investigations might be conducted, in that way, and that way only could the Board of Pharmacy become successful. He was inclined to favor the plan of making the licentiate become a member of the State Association on payment of the registration fee.

E. S. Smith, of Port Henry, discussed the subject at some length. He was in favor of the system pursued in the Province of Quebec, saying :

For the last two or three years I have been thinking considerably of the matter, and it is my impression that it is the only solution we can come to, because if the Board of Pharmacy has not got evidence to prosecute it cannot do it. The Province of Quebec does not require the person who gives the information to give any evidence at all, for the reason that the Registrar is notified of the name and address of the person who is violating the law. The Registrar takes the necessary steps by the orders of the Council. He goes to the parties at his first opportunity when the proprietor is present, or if the store is run without a registered pharmacist, he will walk in and buy something on the schedule of drugs that the unlicensed pharmacist has no authority to sell. He has them labelled with the regular label of the dealer, and walks out of the store leaving his card, saying nothing at all. He turns the medicine over into the Prosecuting Attorney's hands, the authority then passes from him to the District Attorney, who does the prosecuting, because the law explicitly says the label on the bottle is evidence! It requires nothing else for conviction.

Every pharmacist, from the apprentice to the proprietor, pays a legal fee towards the Pharmaceutical Association of the Province of Quebec. In the first instance, if I wish to become an apprentice to study pharmacy in the Province of Quebec, I have to present before the Board of Education a Normal School Certificate, or else they will put me under an examination similar to the Regents' Examination in New York State. If I pass according to the percentage required, I get a ticket giving me the privilege of studying pharmacy as an apprentice. From that day I become indebted to the Board of Pharmacy for 50 cents a year for the privilege of study. A licensed clerk pays a higher fee ; a proprietor at the commencement pays $10. At the present time we only pay $5 for the renewal of license. At the expiration of the year, if we do not pay in 30 days, we are fined at the expiration of 60 days ; our fine is increased to the amount of one yearly fee, and 10 days after that, if it is still unpaid, the name is taken off the list of registered pharmacists. Here, you see, is an income of $5 from each of the pharmacists in the Province. There is not a man doing business who is allowed to sell poisonous drugs or medicines unless his name is on the list of registered pharmacists ; if it is not there, he is violating the law.

We are doing all we can to sustain a pharmacy law for our own protection and that of the public, and I think our licensed clerks ought to pay a little to help to keep the Pharmaceutical Association in a position to protect them when they take our place.

At the expiration of two years after a man registers as an apprentice he is looked up and notified that he has to attend two courses of lectures in two years. There is no registered pharmacist who does not have to pass these two courses of lectures ; he cannot be registered unless he does. The educational standard of these lecturers is laid down by the Pharmaceutical Association; the college has to comply with the requirements of the Association. At the expiration of two years he has his minor examination, and six months after that he has his major examination. When he becomes a proprietor he pays annual due funds. We have got to get into a monopoly; if we don't combine we must go to the wall. I would be in favor of such a Board in this State, and am willing to pay $5 a year for the renewal of my certificate. If the sum is less all the better, but I am willing to pay what is necessary.

Alfred Hy. Mason confirmed the truth of Mr. Smith's observation. He said: "As a licentiate of the College of Pharmacy of the Province of Quebec, and also for some time one of the Council, it may be of service if I confirm first what Mr. Smith has told you, with the addition, that if the Treasurer's report shows a shortage, the Council has power to increase the dues up to $10 if they see fit.

"Like Mr. Holmes I have my certificate locked up, but I have to pay the yearly dues or lose it, hence his proposal would be met by this condition of affairs."

The report of the State board was presented by Dr. Huested, chairman of the committee, and was on motion adopted as read.

Dr. Huested spoke of the difficulties which the board had encountered in prosecuting its work, the lack of funds being especially referred to. With regard to overcoming the latter difficulty he mentioned that some had recommended the obtaining of an appropriation from the legislature, but this was hardly feasibe when it was considered that two examining boards were already in existence in the State, which were self supporting. He alluded to the regents' boards for examination of candidates for law and medicine. These boards were supported by examination fees. The fee for registration by this board is $25.

He was inclined to view with favor the proposed increase in the fee for requesting pharmacists.

What good is in a pharmacy law? is a question which, he said, is often asked. Dr. Huested explained that the pharmacy law and the laws regulating the practice of law and medicine were framed for the benefit of the individuals directly concerned. He adduced reasons to show that a license is a pecuniary benefit to the clerk who holds it, and argued from these premises that the fee should be increased. His object in presenting this argument was to throw light on the points involved, many of the members being poorly posted on the subject.

The final session convened on Thursday morning at 9.30 o'clock. Thos F. Main of New York City was introduced as a delegate from the State Association of Connecticut. He extended greetings and expressed the hope that he would meet some of the members present at the next meeting of the Connecticut Association.

Dr. Huested rose at this point and said it would be desirable to have an expression from the Association with reference to what they would consider the best method of raising funds to carry on the work of the State board. The different methods proposed consisted of re-registration, increase of examination fee, and an appropriation from the State. He asked for a free discussion. Speaking for himself he gave it as his opinion that the prospect of getting an appropriation from the State was dim. The method of raising funds by means of re registration was to a certain extent impracticable, owing to the difficulty of making collections. Personally he was in favor of increasing the examination fee. At present the board received a fee of $5 for each proprietor's certificate, and $3 for an assistant's. He said that he favored a higher registration fee because those to whom certificates were issued would be most directly benefited by the measure.

President Rano said he would not undertake to discuss the matter from the chair, but it seemed to him the Association should put itself on record in the matter. Discussion was invited.

Frank L. Norton, of Delhi, confessed that he had been in favor of re-registration, but he was forced to admit that it would impose a hardship on many druggists throughout the State. That there were advantages to be gained from adopting re-registration he conceded. No argument had been advanced against the adoption of this method, nor against the proposed increase of fee.

President Rano arose at this point to explain the workings of the Erie County law. In concluding he expressed the fear that the State board was hardly well enough equipped to cover the extent of ground contained in its territory.

W. H. Rogers then called upon Mr. Keenan of New York City to explain the workings of the pharmacy law of Illinois.

Mr. Keenan said "I am a licentiate of he State Board of Illinois as well as of New York county, and from my own knowledge of the working of the law in Illinois, I understand that they have no difficulty whatever in collecting the fees for re-registering licensed pharmacists. If a pharmacist neglects to pay his fees, his name is stricken from the list, and according to law, he is not allowed to carry on a pharmacy. From the discussion that has gone on here I am inclined to think that re registration would work to great advantage in New York State in more ways than one. It would work to the financial benefit of the board, and also to the better regulation of the laws, at least to the carrying out of the laws pertaining to pharmacy. The board would be better able to keep track of the delinquents, and those who might be practicing pharmacy without a license. I cannot go into details regarding the State pharmacy law of Illinois, but I remember that the license expires with the end of the fiscal year. The annual registration fee for proprietors, or those allowed to conduct a pharmacy, is one dollar. The registration fee in the first instance is five dollars. That is, so far as my recollection carries me ; it is some time now since I have practiced pharmacy in Illinois."

John H. Hahn, one of the delegates from the Pennsylvania Association, spoke on the workings of the Pennsylvania Act. He was followed by several members of the New York Board who all expressed themselves in favor of re-registration.

The following resolution presented by A. D. McIntyre of Oswego, was finally adopted. It reads:

Resolved, that the legislative committee of this Association and the State Board of Pharmacy be requested to take such action as may be necessary for the purpose of raising sufficient funds for necessary purposes, and be it further resolved that this Association recommend that an effort be made to have an act passed retaining the present fee for original registration and adding a sufficient yearly fee for re-registration to meet the expenses of the State Board.

The election of a local secretary was taken up next, and Fred. Menges of Saratoga placed in nomination. There being no opposition he was unanimously elected.

A. Paradis and E. Alt were introduced as delegates from the King's County Pharmaceutical Society, Brooklyn, and Mr. Paradis acknowledged the courtesy.

The installation of officers concluded the proceedings, and on motion the association adjourned *sine die*.

THE AFTERMATH.

President Rano's inexhaustible supply of stories kept crowds of the boys entertained, but Professor Rusby's fish story captured the house.

E. A. Putnam and the AMERICAN DRUGGIST man were lucky to take passage on the fast launch for the trip on Saratoga Lake to White Sulphur Springs. Though hampered with a prosaic name, their boat, the "Katie," speedily distanced its slower companion, the "Erminie." In passing the latter Mr. Putnam generously offered to throw out a rope to tow it down the lake, but the offer was refused.

Geo. Kempton, Theo. Ricksecker's popular representative, was tireless in his efforts to contribute to the pleasure and amusement of the members, and it may be some satisfaction for him to know that his good work was thoroughly appreciated. He is an old Saratogian himself, and his knowledge of the different places of interest stood him and his friends in good stead. We hope we shall see him with us next year.

But what shall be said of the ladies? The affair would of course have been lifeless without them. Two in particular, in close attendance on the secretary, made things very bright and cheerful for several of the younger members, whom we have no doubt carried away very many pleasant memories of the meeting.

The lecture on Wednesday evening by Professor Rusby on "Rubber Industry in South America" was largely attended, and proved a most interesting feature of the proceedings. The chair was taken at 8 30 o'clock by Alfred Hy. Mason, Ph.C., F.C.S. who introduced the lecturer in a few well chosen words, calling attention to the results of his researches in pharmacy and materia medica. He alluded to his connection with the New York College of Pharmacy as professor of physiology, botany, materia medica and pharmacognosy, and said that we in America might look upon him as one upon whom Professor Maisch's mantle had fitly fallen. The lecture was illustrated with stereoptican views.

The convention was favored during the entire time of the sessions with the presence of a newly married couple, who chanced in on the meeting more by accident than intent. They were Geo. E. Heuther and his young and charming bride. Geo. is a well-known and experienced Harlem druggist, but all his experience was of noavail in his efforts to keep the knowledge of his very recent marriage a secret. Some of the members speedily discovered it, and on his trip to Saratoga Lake he was treated to the time-honored dose of rice and old shoes.

Few of the members were aware of the presence of a lady "kodaker" among them, but such was the case. Miss. Henry was the fair artist, and she succeeded in securing some clever snap shots of special views, etc. There were the steamboats on Lake Bonita for example, but "that is another story."

The exhibits were a an important feature of this year's meeting. Tarrant & Co., wholesale druggists, New York City, displayed a large and valuable exhibit of hair brushes, perfumery and toilet requisites, as well as soda fountain supplies. The exhibits were arranged with good taste, and called forth many expressions of approval.

On Wednesday morning the members drove out to Woodlawn Park and the Spouting Springs. Many of the bottling establishments were visited on the way, and the members treated to liberal quantities of the different waters. As it is proverbial, however, that pharmacists seldom, if ever, take their own medicine, much of the sipping and tasting fell to the ladies who, it may be noted, performed their part well. The enjoyment of the drive was somewhat marred toward the close by a rain and thunderstorm, which caused many of the members to bring the trip to an abrupt termination. The famous racing stables of ex Judge Hilton were visited on the way. The animals were put through their paces, and this exhibition afforded perhaps more genuine pleasure than any of the other sights seen during the day.

The delegates appointed by the New York College of Pharmacy to represent at the annual meeting of the New York State Pharmaceutical Association held in Saratoga last week were: Alfred Hy. Mason, chairman, C. F. Schleussner, Reuben R. Smith, C. O. Bigelow, Herman Graeser. Mr. Mason was the only delegate in attendance.

Theo. Ricksecker, the widely known New York perfumer, exhibited an unusually fine selection of perfumes, toilet soaps and powders. Ricksecker's goods must certainly be popular with the refined people who contribute to the gayeties of the season at Saratoga, for it was a matter of comment that every one of the local druggists was well stocked with the different varieties. It was noticeable that "Martha Washington" and "Floral Chimes" seem to be the favorite odors. The "Ricksecker" perfumes are remarkable both for fragrance and purity of odor, as well as for originality of conception in the style and arrangement of the containers. The labels commend themselves particularly as fine examples of high art in lithography as applied to perfume label work. An important feature of the exhibit was a display of Ricksecker's Skin Soap. As told elsewhere, this exhibit was under the charge of George Kempton, than whom no more gallant and genial representative of the commercial traveller is to be found.

William R. Warner made a very attractive display of pharmaceuticals, including granules and granular effervescent preparations.

"Well bought is half sold." Read the "trade notes" and market review every week.

Massachusetts Association.

The thirteenth annual meeting of the Massachusetts State Pharmaceutical Association was held at Worcester on the 26th, 27th and 28th of June. It was one of the most satisfactory annual meetings held since the inception of the organization. There was a large attendance, and a vast amount of business was transacted which was combined with a generous sprinkling of pleasure. That so much business was disposed of, was due in no small degree to the experience of President Rice and Secretary Leavitt, while the local arrangements ran so smoothly as to reflect creditably upon the local secretary, F. M. Harris. The first business meeting was held on the 26th. President Rice occupied the chair, and the delivery of his address was first in order. It dealt largely with trade interests, and the reading was intently listened to. The address was accepted and referred to the usual committee. The reports of the treasurer, secretary and trustees of the permanent fund followed.

In the evening there was an entertainment. C. F. Nixon, Ph.G., M. C. P., 84, gave "A talk on the medicinal plants indigenous to Massachusetts." It was an excellent paper, and was illustrated by plants grown by the author. A musicale followed.

Two business meetings occupied the next day. In the morning the report of the committee on "Trade Interests" was first taken up. It was not accepted, the reason being that it was the report of one man, and not of the committee. The vote on rejection was unanimous. The committee on "Legislation" reported that it had successfully contested many bills inimical to the drug trade, and that it had not asked for or urged the enactment of the new law pertaining to sixth-class licenses. Mr. Henry Canning for the "Local Organization" committee gave an interesting *resumè* of what had been accomplished in this State during the past year.

The afternoon session was first devoted to the reading of communications and to general business. The report of the delegates to the last A. P. A. meeting was submitted, and them officers were elected as follows: President, Frank M. Harris, Worcester; vice-presidents, Henry F. Rockwell of Fitchburg, Charles F. Nixon of Leominster, W. F. Sayer of Boston; secretary, Miner L. H. Leavitt of Boston; treasurer, Thomas B. Nichols of Salem; trustees, C. A. West, F. E. Mole and F. E. Whiting.

President Harris has been a zealous worker in Interstate League matters, and is the present treasurer of the New England Retail Druggists' Union. Secretary Leavitt was of course elected; this is the fourth year that he has occupied this responsible position. Some discussion then followed in relation to reviewing the initiation fee in order to increase the permanent fund, but the subject was finally laid over until next year. Prof. W. L. Scoville reported for the committee upon "Adulterations and Sophistications," and then read a paper upon "Chalk mixture." Papers by Fred T. Drake and John T. Manning

followed. That of the former was upon "Adulterations of powdered nux vomica," and the latter dealt with "How to keep an Index." Over 125 new members were voted upon at this meeting.

In the evening came the annual banquet. It was held at the Bay Street House; music was furnished by Knowlton's orchestra. President Rice occupied a chair at the head of the table, and after the good things had been disposed of, introduced the speakers. Representative Rowe spoke for the "City of Worcester," President Canning for the "Interstate League," President Patch for the "A. P. A.," John T. Manning for "The Ladies," and James F. Geurin for "Our Invited Guests."

At the meeting of the 28th Prof. Patch submitted the report of the committee on "Papers and Queries." The instillation of officers followed, and it was then voted to adjourn to meet in Boston next May at the time of the holding the proposed Pharmacy Fair.

A pleasure ride about the city and to Lake Quinsigamond followed. Then came a sail on the lake. Returning, lunch was served at the "Lake Side Boat Club" house. The exhibits at this meeting were very attractive, but none occupied more attention or received more praise than that of the Massachusetts College of Pharmacy, which included all of the U. S. P. drugs and preparations and was arranged by the students of that institution. President Harris has made the following appointments:

Executive committee: J. Allen Rice, Milford; J. F. Geurin, Worcester; W. F. Sawyer, Boston, with the president and secretary ex-officio members.

Committee on legislation: C. H. Crane, Somerville; C. B. Emerson, Haverhill; A. K. Tilden, G. W. Cobb and W. F. Sawyer, all of Boston.

Committee on trade interests: J. F. Geurin and W. L. Davis of Worcester; G. C. Brock, Lowell; F. M. Pease, Lee, and F. W. Reeves, Cambridge

Committee on papers and queries: E. L. Patch, Stoneham; W. L. Scoville, Boston; J. T. Manning, Pittsfield; H. S. Richardson, Concord; and C. F. Nixon, Leominster.

Committee on adulterations and sophistications: F. T. Drake, Stoneham; W. L. Scoville and S. A. D. Sheppard of Boston.

Committee on memberships: W. H. Willard and J. F. Smith of Worcester; J. T. Manning, Pittsfield; F. W. Reeves, Cambridge, and H. T. Viall, Boston.

Committee on local organization: Henry Canning, G. W. Cobb, W. C. Durkee, F. L. Carter and W. F. Sawyer, all of Boston.

It is a remarkable fact in botany that no species of flower ever embraces, in the colors of its petals, the whole range of the spectrum. Where there are yellows and reds there are no blues; when blue and red occur there are no yellows, and when we have blues and yellows there are no reds. Tulips come nearer to covering the whole range of the spectrum than any other species. They can be found ranging through reds, yellows and purples, but a blue one has never been found.

NEW YORK.

The marriage of Mr. Alfred Bickerton Evans, managing director of "Evans & Sons, Lim.," wholesale druggists, Montreal to Agnes Reid, daughter of John Cassels, also of Montreal, took place on Saturday, June 23, at Erskine Church. The happy couple left for New York, and after a short stay sailed on the s.s. Teutonic for Europe, where they will remain some time. Before leaving Mr. Evans was presented with a very handsome grandfather's clock by the employés of the firm in Montreal, Toronto, Boston, Mass., and Victoria, B. C. This form of presentation was chosen because a grandfather's clock was always considered a link between the past, the present, and future, and they trusted that he might live long enough to relate to his grandchildren how he came possessed of the grandfather's clock. Mr. Evans in replying thanked the employés for their gift, but he valued far more the kindly feeling which actuated it. The establishment was closed for the day to enable the employés to do honor to the event.

William A. Beardmore, Ph.G., N. Y., C. P., 1889, who has been assistant apothecary at the Vanderbilt Clinic for some two years, has purchased the store at 384 Summit avenue, Jersey City, and has it handsomely refitted and opened under the title of the "Clinic Pharmacy." Mr. Beardmore's extensive experience and marked ability will no doubt bring him the success that he deserves. Dr. L. C. Corbin Ph.G., formerly apothecary U. S. N., who has recently graduated in medicine from the College of Physicians and Surgeons, Baltimore, succeeds Mr. Beardmore at the Vanderbilt Clinic.

Circulars advertising noxious medicines and implements have been numerous in Jersey City for about a week. They directed that orders should be addressed to the Scientific Remedy Company, Box No. 62, H. C. Station, Jersey City Heights, and United States Commissioner Romaine, to whom they were referred, decided that the mails were being used for illegal purposes. Recently a man who took the letters from Box 62 was arrested by a detective. He gave his name as Walter Belland, but refused to say anything further. The Jersey City police regard the capture as an important one.

Thomas A. Hedley, who has spent the last few weeks in this city in the interests of Evans & Sons, Ltd., of Montreal and Boston, has made a great many friends in the trade. Mr. Hedley has a marked advantage in the thoroughly practical knowledge of the business, which he gained by some fourteen years or so of experience in the laboratory of the firm before he took up the outside work. Mr. Hedley reports a rapidly growing appreciation on the part of the drug trade of the excellence of the "Monsterrat" lime juice, which is controlled by his house.

Otto Rauchfuss, of Seventh street and Avenue A, had a large surgical contract on his hands on the night of July 3, in the way of dressing the burns of a lot of small boys. The boys, after the manner of their kind, had invested their accumulated earnings in explosives, and while engaged in celebrating they accidentally set fire to their "tut" of powder, which in turn set fire to them. Mr. Rauchfuss almost exhausted his supplies of dressings and of carron oil, as five of the lads were severely burned.

G. M. Howell, an old time New York druggist, is now in entire charge of the New York branch of the Low Art Tile Co. in the Havemyer building, Church and Cortlandt streets. He has been kept quite busy of late attending to numerous orders. A Low Art Tile fountain of unusual beauty of design has been placed in Hudnut's new store at 205 Broadway, while Geo. F. Spaeth, the well-known druggist of Long Island City, has invested in a particularly neat apparatus.

Harry Heller, the rubicond, jovial and inimitable secretary of the Alumni Association of the New York College of Pharmacy, has launched his by no means fragile craft upon the (stormy) seas of matrimony. [The parenthesis is the work of the bachelor member of our staff.—ED.] Mr. Heller was married on Sunday, June 24, to Miss Anna Metzger, of this city, and every one of their many friends unite in wishing the newly married couple much joy.

William M. Wisdom, a manufacturer of toilet articles, has been arrested on a charge of libel preferred by William C. Halleck of 304 West 139th street. Halleck was the New York agent of the Omega Chemical Company of Portland, Or., and he accuses Wisdom of bringing about his discharge by writing a libellous letter to T. O. Downing, president of the company.

Charles Magnum Weisz expects to leave on his annual fishing excursion about the 15th inst. He primarily had his arrangements made to spend his vacation in Maine, but learning that it was a Prohibition State he altered his plans to conform with his requirements. We trust he will find the air of Fulton County invigorating.

J. L. Hopkins & Co. have been compelled by the rapid growth in their business in crude and ground drugs, to remove from their former location at 14 Platt street, to more commodious quarters two doors further west at No. 16 of the same street, formerly occupied by the Vollman Spring Company.

Chas. G. Tomlinson, the well and favorably-known druggist of 102d street and Amsterdam avenue, died on June 16. Mr. Tomlinson located at 100th street and Amsterdam avenue nearly 23 years ago. By hard work he had built up a very large and lucrative business located at 102d street for the past eight years.

The Chalaum Salve Company of New York City have been granted articles of incorporation to manufacture a compound known as "Chalaum Salve;" capital, $50,000. Directors: Samuel F. Page, George W. Prowdgers, and George Craft, of New York City.

James H. Redfield, a well-known wholesale druggist of this city, died suddenly in Boston on the 24th inst., presumably from heart disease. His body was sent to Clinton, Conn., his birthplace. He leaves a widow and two children.

Geo. M. Smythe, of J. M. Maris & Co., Philadelphia, was in New York, a few days ago attending the graduating exercises of the school of which his daughter is a student.

Isidor Schulkind has purchased from the estate of W. Duncan the West Shore Pharmacy, Forty-second street and Ninth avenue.

Percy Latham, the well-known representative of Billing, Clapp & Co., Boston, spent a few days in the city recently.

S. P. Watson, representative of W. H. Schieffelin & Co. in the South, is now in own for a few days.

Theodore Weicker, of Merck & Co., is enjoying a well-earned vacation in Darmstadt, the home of the parent house.

Dr. Peter M. Murphy, who so long and successfully conducted the pharmacy at 442 Broadway, Albany, died at his home in that city on June 27.

McClellan & Patton, formerly of 508 Manhattan avenue and now of 48 Maiden Lane, are giving their whole attention to the drug brokerage business.

Benj. L. Hume, the well-known proprietor of the Empire Syringe Co., New York, is spending his summer vacation as the guest of Col. Day, the publisher of *Town Topics*.

To increase the sales of his Sea Salt, A. J. Ditman, 4 Barclay street, is giving away with each 5 lb. box a glove shaped loofah. The loofah affords a pleasant method of applying friction and is a valuable addition to the requisites of the bath.

ILLINOIS.

CHICAGO, July 5.—The paramount condition that is commanding public attention is the strike, and like every branch of commercial industry, the drug trade is affected. Supplies are being cut off in all directions, and the emergencies that must be met are numerous and serious. At this time, however, when the Fourth has passed and disappointed the alarmists in a scarcity of accidents and little destruction of property, the situation has become much brighter. Railroads which gave evidence of a complete cessation of traffic are resuming business at the old stand. In the direction of the retail trade, the strike has proven a great benefit. Soda business means drug business, and during the troubles the streets have been thronged with men out of employment, but not inclined toward liquor. These men patronize soda fountains, and seeing something else wanted or needed at home, make a purchase which would otherwise have been overlooked. The suburban druggists have been reaping a harvest which nearly turned the heads of a few of them, and two or three became almost insane over the thought of their supply being shut off. This was due to the abandonment of suburban service by several of the roads, and the suburbanite remaining at home in consequence. The latter had nothing to do but celebrate, and the most popular place in the country town is the drug store on the corner. The suburban druggist has been doing a thriving business, but a serious danger menaces him. The cut rates have resulted in reducing the profits of the down town druggist, but give indications of proving fatal for the outside man. People in general are familiar with the situation and the cutting has become general, extending further and further each week. Even where they fail to advertise the fact, dealers are cutting to meet competition. The volume of business is practically the same as before the cut, with greatly reduced margins. The suburban or country druggist must command an unusually large trade to be able to get away from the legitimate profits of the business. The general cut reaches an average of 20 per cent. on everything, and the suburban druggist cannot stand this. The result will prove disastrous to many unless the pernicious practice should be corrected. The general outlook, however, in down town retail circles is bright. The month of June, especially the latter part was exceedingly dull, but the month of July has opened with a vigor and strength going far to give promise of a profitable month. This is applicable to all departments, from the soda fountain to the prescription case, and is especially appreciable after a dull winter and spring. The wholesale trade is beginning to brighten up a little; although seriously affected by the railroad strikes, are able to fill all orders. No alarm is felt, though, as the trouble is looked upon now as waning, and things are adjusting themselves to the normal condition.

One of the greatest menaces to the public arising from the present congestion of railroad movement is that directed toward the drug trade. Although the bulky drugs are shipped into this market principally by water, all patent medicines and chemicals are ordered by fast freight. The supply in this direction has become very limited in the past few days, and even the more bulky drugs are becoming scarce, and it is becoming a serious question among the wholesale druggists of Chicago how to supply their outside customers. Even at this time orders have been canceled, and the dealers have been compelled to transfer the orders to some competitor, and everything possible is being supplied by express shipments. The country druggists are becoming alarmed at the reports made by the wholesale men of Chicago, and substitutes are being introduced whenever possible. The patent medicine and chemical trade is in bad shape, and should the strike continue much longer physicians and druggists will be unable to offer protection to the public health. On some of the staple articles for which there is a constant and general demand, the price has already advanced a little, and there is no telling what may be the cost of an ordinary dose of quinine should trouble continue.

The Ryerson Physical Laboratory, built at a cost of $250,000, has been formally presented to the University of Chicago. The dedicatory services were held in the Undergraduate Lecture Hall of the second floor of the new laboratory. Dr. Harper announced the address of Martin A. Ryerson, the donor, amidst prolonged cheers. There were seated on the platform President Harper, Martin A. Ryerson, Prof. Carhaart of the University of Michigan, Prof. Snow of the University of Wisconsin, Prof. Sylvester Burnham of Colgate University, and Prof. H. H. Donaldson, Prof. Samuel B. Stratton, and Prof. A. A. Michelson of the University of Chicago. Mr. Ryerson said, in conclusion: "Gentlemen of the Board of Trustees of the University of Chicago, I now tender to you the Ryerson Physical Laboratory to be the property of the University of Chicago, and to be used for the purposes which its name indicates. It is my intention to place upon its walls a tablet suitably recording the fact that it is erected in memory of my father, Martin Ryerson, a man who in the struggle to overcome the material difficulties of life found time for intellectual growth and for thoughtfulness of the welfare of his fellow-men. I hope this laboratory will make a record as a result of his honorable and useful career. I have only to add that I value the opportunity which I have to aid in the advancement of the great science of physics, and at the same time erect a useful and lasting memorial to one whose memory I cherish."

The soda water business is not what it has been, and this summer the Chicago trade has been enigmatical. More people are imbibing the cheap drinks than ever before and less people are patronizing the fountain altogether. Men who have for years been steady patrons and always took a 10 cent drink now dodge in for a five cent drink, or remain away altogether. A prominent druggist, who operates one of the largest and busiest fountains in Chicago, expressed himself in prononnced terms the other day. He had no theory or ideas to offer, but consoled himself with the thought that the general stringency of the times had tied up so much money that the people could not enjoy their accustomed luxuries. The weather has been turning handsprings in such an uncertain manner that the soda water business has been injured through that influence.

E. R. Newcomb, who has been in the employ of Morrisson, Plummer & Co., as city salesman since 1882, died of consumption June 22.

Owing to the heat and the depressed condition of business, the regular June monthly meeting, of the Chicago Apothecaries' Society, was not held.

E. H. Buehler is making preparations for a fishing trip among the northern lakes. The time for departure is indefinite as trade is quiet, and Mr. Buehler does not want to overlook any possible business in his direction.

Owing to the stagnation of business few new stores are being opened, although a number of the younger men now engaged in operating the establishments of others have signified their intention of branching out for themselves this Fall.

A. H. Ramey, for many years in the drug business at Aurora, has applied for patents on a Castile soap cutter, which has been pronounced a success by Chicago druggists. Mr. Ramey some time ago secured a patent for a catarrh inhaler.

The establishment of the Indian supply depot, in Chicago, has caused considerable excitement in wholesale drug circles. The removal from New York of the warehouse was made on declarations that the Chicago market was as steady and low as any in the United States, in all commodities and supplies. It depended on the Chicago dealers to demonstrate this condition of things, and drug men made their bids down to bed rock. It has just been announced that at least one Chicago wholesale drug house has secured a contract for several thousand dollars' worth of drugs and supplies.

Ewing Smith, city salesman for Morrisson, Plummer & Co., has gone to Massachusetts on his vacation, to visit his distinguished father, the Rev. Dr. Smith, the author of the national hymn, America.

It is rumored that Dr. A. D. Lowell will soon establish a drug store in Rogers Park, making the third one in that pretty village. Dr. Lowell recently erected a building with store room and apartments. The post-office people came along and took the store room, so he is now building an addition, in which, it is reported, he will establish a drug store.

Wm. Henry Hall Dead.

William Henry Hall, of the widely known wholesale drug firm of Hall & Ruckel, New York City, died suddenly at Budapest, Austria, on Saturday, June 30.

Mr. Hall went abroad April 3, accompanied by his two daughters and youngest son. His two other sons were notified of his illness and sailed for Europe a week ago.

Mr. Hall was about sixty-five years old. He had been unwell for some time past. The immediate cause of his death was paralysis. Mr. Hall has occupied a prominent place in the Association of Manufacturers and Wholesale Dealers in Proprietary Articles, and was at one time its vice-president. His home was at 61 West Fifty-sixth street. He was a member of the University Club.

Cholera.

Cholera still prevails in Warsaw and its vicinity. There were 22 cases and 10 deaths in the city of Warsaw itself within the last five days of the date up to which intelligence has been received; 22 cases and 13 deaths in the government of Warsaw, and 11 cases and 6 deaths in the government of Plock have also been recorded in the space of a few days. Although the disease cannot consequently be said to prevail in Russian Poland to any great extent, it is nevertheless disquieting to learn that some 55 new cases and 29 deaths occurred there in less than a week.

Some cases of cholera have also occurred on the Prussian part of the Vistula, and it is announced that comma bacilli having been found in the water of that river near Dantzic, the police have closed the bathing establishments and forbidden the use of the water, while extra precautions have been taken in the way of sanitary supervision and preparation in the districts. The correspondent of the *Standard* states that Professor Koch had gone to Dantzic to confer with the local authorities and inspect the localities where cases of choleric disease had occurred.

The persistent manifestation of this disease in Brittany is a noteworthy fact to which we have already called attention. The Paris papers deny that France is threatened with an epidemic of cholera, and it is stated that Professor Netter had failed to discover any trace of Koch's bacillus in a few fatal cases of cholerine which had occurred.

As regards the late epidemic at Lisbon it seems to have been now established, as stated in *The Lancet* at the time, that the disease was not cholera. A great deal of unnecessary alarm and mischief was created by statements to the contrary. The disease was not fatal, and was not bacteriologically identical with cholera.

PENNSYLVANIA.

PHILADELPHIA, July 9.—Midsummer comes a little earlier in this city than elsewhere, it seems, for people begin to leave for out-of-town resorts after May begins to advance, and by the time the Fourth of July has arrived, sections are almost depopulated. All of this exodus means much to the urban pharmacist. It means in the first place that he is to be deprived of the patronage of regular customers from one to three months, and when they do return how distressingly healthy everybody is. The drug business in Philadelphia during the heated term is increased in volume from those unfortunates who stay at home, and, in many stores, prescription trade booms. The principal reason for this may lie in the fact that the city is one of the hottest in the country, not only because of the prevalent high degree, but the depressing humid atmosphere intensifies the misery. So the poor babies suffer, and delicately nurtured adults succumb, and the doctors find plenty to do. And it is this prescription trade that naturally helps to balance things, and make up for the absence of those who have fled to mountain and seashore. The weather is good for the sale of sundries, and the shrewd pharmacist who has learned where and how to buy such goods can earn a good profit in disposing of them. The display of sponges for the toilet is larger than ever, and, while the average quality may not be as fine, the article is serviceable and good enough for the purpose. Prices are reasonable, especially when the short supply of Florida goods is taken into account.

The advent of warm weather has caused a merry whiz and a hissing siz in nearly all the drug stores of this city. During the last week there has been a big demand for cooling drinks, and the druggist who has not been enterprising enough to have a soda water fountain has lost considerable trade. The soda water fountains have had a run on them, and judging from the state of the thermometer at the present writing there is no possibility of the demand ceasing for some time to come. During the last few years the soda fountains in this city have played a prominent part in the fitting up of a drug store, and instead of the old style goose-neck fountains there are a number of sumptuous ones, which are used as an advertisement by the wide-a-wake druggist. The soda water counter of George B. Evans on Chestnut street, west of Eleventh, is constantly crowded with customers, and to the sale of soda water the success of his business in a measure is accounted for, for with it the thirsty customer sees the interior of the store, and to see it is to purchase something. This druggist is one of the most enterprising in the city, and he frequently advertises himself by having his show windows filled with some novelty. He has secured the building next door, and he is using the windows to show off his wares. The soda water trade is like a golden harvest. People flock to popular fountains in droves to quench their thirst. No very new or original drinks have been offered as yet; perhaps it is too early in the season, or the advertising agents may be a little behind hand. "Moxie," now almost a memory, is sold here and there, but there is no wild rush for it, or any substitute in the affections of the people. Pharmacists have not been so much on the lookout for novelties at the fountain as to maintain and improve standard flavors. It is a fact that to-day there are more stores dispensing genuinely acceptable soda water than at any previous time.

The retail druggists here have recently paid more attention to dressing their windows than ever before. This is especially so since the jobbers and retail dry-goods houses have been selling such articles that were formerly considered to be the property of the druggist. There is hardly a dry-goods house of any size in this city that does not sell perfumes and the various powders that are essential to a lady in her toilet. If they sold these goods at a reasonable profit the druggists would not object, but many of the dry-goods houses use these articles as an advertisement, and frequently sell the perfumes, etc., at a price a little above cost, and in some instances at cost. This has naturally hurt the trade of the druggist, and he is endeavoring to get the trade back which was once exclusively his. To do this, he has awakened to the fact that he must make his windows as attractive as his competitor, and in order to accomplish such a change the old style bottles with their colored waters are being put aside, and fancy bottles which are illuminated by electricity are being used instead. There are also other innovations, which all help to give the exterior of a drug store a pleasing appearance.

The trade in this city is very dull, and the retail druggists are getting more than their share of bad business. In the early part of the month there was a slight improvement caused by the annual cholera scare, and a number of druggists who had on hand a large stock of disinfectants were enabled to dispose of a big amount, but outside of this there is very little to mention in connection with the retail drug trade. Many of the druggists have made preparations to take a short rest, but it is now thought that the vacations will be limited owing to the bad business of the present year.

The Distillers' and Cattle Feeders' Company keeps the dealers in alcohol busy watching the next move of the trust. This corporation is universally disliked, and whenever anything can be done to hamper it, it is done without any compunction. The trust has ruled the trade with a hand of iron, and whenever it thought any of its buyers were getting their alcohol from another source, then a notice would be issued notifying the accused that they had forfeited all rights to any rebates. This was the case with the Smith, Kline & French Co., but this firm would not surrender what it justly considered its rights, and brought suit against the Distillers' Co. for the amount of its rebates. The matter was taken to Court, and on June 29 the counsel for the Smith, Kline & French Co. entered judgment against the Distillers' and Cattle Feeders' Company for $2,995,63. for want of an appearance.

The counsel also filed an injunction against the trust. The cause of this suit was that the Smith, Kline & French Company determined to stop selling the sale of alcohol in large lots, and all the orders they got for this article they delivered to another party The orders for alcohol by this drug firm were very large, but when they made the new step they fell off to a few barrels a month. The trust then decided that the drug firm was not living up to its agreement with it, and notified them that they would not receive any rebate; the consequence being that the matter was taken to Court, and not only this firm is looking anxiously forward to the conclusion of the suit, but all the other dealers in alcohol who were compelled to purchase from the Distillers' Company.

The Charles E. Hires root beer company is filling more orders this year than ever before. This beverage is now kept by nearly all the drug stores in this city, who make a specialty of it. The present manufacturing plant of the company is not large enough to meet all the requirements placed upon it, and there is some talk of the plant being moved to a larger building. This company has opened a store on Chestnut street, East of Eleventh, where the beverage is dispensed to the over-heated and thirsty wanderers by two very pretty ladies. Whether it is the liquid or the young ladies that causes such a rush, it is nevertheless true that to be in the swim it is the proper thing to drop in the store during the late hours of the afternoon and sip a glass of beer.

The Gorman tariff bill which has just passed the Senate by a small majority, and is now at this writing in the hands of the House, is being anxiously watched by the Philadelphia druggists, as in it there are several measures that will greatly affect their business. The principal item at the present time is the schedule that pertains to alcohol. As the bill came from the House there was levied a $1 tax on every proof gallon, but the Senate increased this tax to $1.10, and making it take effect on the passage of the bill, while the House schedule goes into effect two months after the passage of the bill. If the bill passes as it now stands it will increase the price of alcohol to the dealer 38 cents for every wine gallon, but if the schedule as in the original bill is adhered to, the increase will be about 18 cents for every wine gallon. As the bill now stands it goes into effect at once, which will prevent the laying in of a larger stock of alcohol; besides this, none of the holders of alcohol will sell large quantities, it being very hard to secure more than than one barrel at a time.

In connection with this the amendment of Senator Hoar to exempt all alcohol used in the arts and sciences from duty is considered quite impracticable, as there is not the element of equity about it that there should be. This amendment if carried out would give the trade almost exclusively to the large and wealthy manufacturer. To get at the bottom of the matter it is proposed to place in the hands of the Secretary of the Treasury the power to carry this law into effect, and for him to do so he would have to exercise a general supervision over all manufacturers that use alcohol, to see that it was not used for any other purpose than that specified. To do this the secretary would be compelled to establish bonded warehouses in the various chemical and medical establishments where alcohol is used. This would be in a measure all right to those that could afford it, but the small manufacturer and the retail druggist who handles only small lots of alcohol, it would be a hardship as well as an impossibility, besides giving the already rich concern more power over the poor one. Some years ago when Philadelphia was represented in Congress by Samuel J. Randall, it was proposed to the Drug Exchange in this city that if they would draft a bill for the exempting of alcohol he would try to get it through Congress. The matter at that time was taken up, and after a thorough going into it was deemed impracticable, as it was found that each dealer in alcohol would be compelled to have a bonded warehouse on his property, or in other words the Government was to be given the right to the freedom of the establishment. Rather than to do this it was decided that it would be better to pay the tax. The wholesale druggists are of the same opinion now, and they cannot see any way out of paying the tax.

The passage of the tariff bill and its signature by the President is being rather anxiously waited for by some of the local dealers in drugs who have bought stocks of morphine and opium, in anticipation of its appreciation. These drugs have been held for quite a few months, and it is said that holders are ready to secure the profits of which they have been dreaming.

This is the finest section in the world for pasturage and good butter, but, in spite of natural advantages, oleomargarine crops out in quite a number of places as an article from the cow. A second prosecution of violators of the law was made last week, and the $100 fine was imposed. Dr. Leffman, the noted chemist, made tests on the suspected samples. Many of the defendants said they had been imposed on, as the article had been purchased as butter. Dr. Leffman then gave them a test to distinguish between oleomargarine and butter, saying that a little butter placed in a tin cup and held over a gas flame will foam as it melts, but the oleomargarine will have a salt formed on its surface and then sputter.

Governor Pattison has re-appointed A. G. Tafel, of this city, a member of the State Pharmaceutical Examining Board. Mr. Tafel represents the homeopaths.

The recent death of M. Chievallas, a French chemist, in an asylum near this city, showed the end of a career in which genius and fortune played important parts, involving the expenditure of millions and the conception of enterprises on an enormous scale. Mr. Chievallas, after disappearing from the firmament of science in which he shone with brilliant but meteoric force, lived in a tenement house at Fifth and Vine streets, in apartments which rented for $8 a month.

In 1871, a young Frenchman visited Richard Biggs, the New York representatative of an extensive New England carpet manufacturing establishment. He was plausible of conversation with perfect manners, and introduced himself to be M. Chievallas, a textile chemist from Lyons. He said he was an expert in dyeing, and claimed to have a substitute for madder that would revolutionize trade in that line in America. Finally an impression was made on shrewd Mr. Biggs, who became interested in the chemist's ideas, and a meeting was arranged with leading textile experts. There it was made plain that M. Chievallas understood his business, and was no imposter. Three thousand dollars were raised to test his formulæ. M. Chievallas went into a labratory, aided by an assistant, and with a dozen bottles of extracts made a deep scarlet and an old gold color that American manufacturers said were new to them. A syndicate was formed without delay. The new process, it was promised, would cause a saving of 80 per cent. over old methods. The young inventor received $100,000 for his receipts, and was paid a salary of $6,000 a year to superintend the plant. Then M. Chievallas began to get rid of his fortune. In reckless manner the $100,000 was dissipated, after which he wanted another bonus from the Company. This was refused, and he quarreled with those over him, leaving the place. The Company had the formulæ, but, to the dismay of those who tried to use them in the way the Frenchman had done, they only failed, although his work had been done before their eyes After sinking $400,000, the new process was abandoned.

M. Chievallas was resourceful. He interested a wealthy steamship man named Dimick in a scheme, and also a woolen manufacturer, and both came near being ruined as the result. After that Chievallas left the East, and when again heard of it was in connection with an enterprise for extracting gold from quartz in California gulches. Flood and O'Brien, the millionaire miners, being financially interested. Later on, the daring Frenchman formed a company to work Chilian nitrate beds, and a million dollars was subscribed for the purpose. When again at a loss for something to do, he taught chemistry lessons, having squandered the fortunes his genius had brought him. Eight months ago in company with his wife, he came to this city and took rooms on Vine street. When he died he was a pauper.

C. A. Eckles of Sixth and Vine streets has sold his store to P. G. Easkin, who has been his chief clerk for some years.

H. C. Frederick, formerly of West Philadelphia and recently of Tenth and Green streets, is now traveling for Hance Bros. & White.

The Delaware Pharmaceutical Association has offered two prizes, one of $20 the second of $10, for the best essays to be read at its annual meeting in May, 1895.

Richelle & Co., Thirteenth and Market streets, Philadelphia have disposed of their store to J. M. Hillen of Shenandoah, Pa. Mr. Richelle will in future devote his attention to the manufacture of his specialties, which have already attained considerable reputation.

George A. Gorges, one of the leading pharmacists of Harrisburg, Pa., is now established in new quarters which are handsomely furnished and well equipped for business purposes.

J. Palmer Rothermel, who formerly clerked for Charles H. Clark (at 36th and Race streets) has gone to Lewiston, Pa., to manage the pharmacy established by the late A. P. Martin.

Joseph S. Beetem has sold his drug store at Seventh and Market streets, Wilmington, Del., to Joseph C. Roberts, Ph.G., of Philadelphia, and Richard S. Dripps of Coatesville, Pa.

Hackett, Marshall & Co. have resumed the manufacture of druggists' specialties at 27 North Second street. They will make a specialty of non-secrets and would be pleased to submit samples and prices to the trade.

Special treasury agent G. W. Whitehead last week seized fourteen pounds of the costly drugs phenacetine and sulfonal, which, he alleges, had been smuggled into the United States from Canada. They had been sent, he says, by a well-known drug house in Toronto, Canada, to E. A. Kingston, a large retail druggist in Buffalo, N. Y., who in turn sent them to the drug manufacturing plant of the H. K. Mulford Company, No. 2134 Market street, where the seizure was made. Milton Campbell, a member of the Mulford Company, says that the drugs were sent to them to be manufactured into compressed tablets and returned to E. A. Kingston. Such work is part of the Mulford Company's regular business. The company, he added, had had business transactions with Mr. Kingston for the last five years, and they promptly notified him by telegragh of the seizure. Agent Whitehead locked up the seized drugs in the seizure room in the United States Appraiser's stores, No. 121 South Second street.

William R. Warner, the senior member of the firm of William R. Warner & Co., famous for pharmaceutical preparations of all kinds, is a traveler of wide experience. He has been in Europe recently, spending much time in Italy, and the voyage made his twenty-first trip across the ocean. The firm received a silver medal at the recent International Medical Congress at Rome for its superior pills.

Hance Bros. and White, pharmaceutical chemists of this city, have had a book published in attractive form on "How to make a Drug Store Pay Better." It certainly treats on a subject which is a live issue with many pharmacists. Much hard sense is presented. It says, among other things: "A druggist has the chance to better himself as almost no other tradesman has. The way is peculiarly open. In other professions and businesses a high degree of success is fairly common; in drugs it is extremely rare. Not because of any difficulty in the business itself, but because the druggists do not happen to see how easy it is to make more money with the start they have got. They do not see the way to do it, because they are looking in the wrong direction for it."

Points on location and arrangement of the pharmacy are given, together with the character of the trade which is desirable and that class found to be unprofitable. It is hinted that the pharmacist should not become so high a professional man that he overlooks honorable business opportunities. Liberality towards customers is urged, and it is clearly stated that the pharmacist and his assistants should always be ready to render some slight gratuitous service to callers. There is much wisdom in this little book, especially for a young man whether he be employer or clerk.

The manufacturers, Chapman & Rogers, 510 Arch street, made a decided hit on the evening of July 3d, which was the celebration of the hundredth performance of the new opera "Princess Bonnie" at the Chestnut street Theatre. They had four handsome gentlemen of color stationed in the lobby in full evening dress, who presented to each patron a sample bottle of "Princess Bonnie" perfumes mounted on a handsome gilt-edged souvenir card. The new odor is delicate, fragrant and lasting, and even without such an attractive name would soon become popular.

MARYLAND.

BALTIMORE, Md., July 8.—The pharmacists of Baltimore were among the first to consider the advisability of a law to regulate the practice of pharmacy in this country, and as far back as 1870 succeeded in having a law passed applying to Baltimore; yet we have never succeeded in having a general State law enacted, while some of our newer sister States, particularly through the West, have State laws that seem to give satisfaction. The first law, as framed for Baltimore, was not as satisfactory as had been expected of it, and after wasting an amount of time and energy in trying to get the Solons at Annapolis to pass a law for the State at large, they were forced to compromise on an improved law for Baltimore. Under the active operation of this last law a higher standard of qualification is being maintained, and the law is undoubtedly having a good effect. The standard of the examining board may be surmised when their report show that of the candidates for examination, since the passage of this act in '92, over 45 per cent. have been refused their certificates. The law makes it requisite for a registered pharmacist to be in charge of each and every store under penalty of a fine of $50 per week for non-compliance with this act, and has required that the State's Attorney has charge of complained cases, thus relieving the board of the trouble and worry of prosecuting the offenders. The present board, lately appointed for two years, consists of Prof. D. M. R. Culbreth, M.D., president; John F. Hancock, Ph.M., secretary, and Thos. L. Richardson, Ph. G., treasurer, Mr. Richardson taking the place of E. Eareckson, M.D., who served on the old board with the first two named gentlemen, and who lately resigned. The board meets the first and third Tuesday of each month for examination. This month the successful candidates were Stanly M. Stuart and Frederick C. Ruths. F. C. Ruths takes charge of the newly opened Clifton Pharmacy, corner of Chase and Gay streets.

Louis F. Sherman has bought the store of Dr. E. M. Bonner, corner Front and Baltimore streets.

Dr E. M. Bonner has opened a pharmacy at Carey and Baltimore streets.

J. Chas. Smith and wife are summering in their country home, near York, Pa.

John H. Hancock will shortly go to Atlantic City for several weeks' vacation.

Mr. Walz will retire from the drug business and go in the real estate business.

Chas. E. Sonneburg & Co. have bought the old stand corner of Baltimore and Green streets, formerly owned by Dr. E. J. Perkins.

Chas. L. Meyer, formerly with Dr. L. C. Horn, has bought from J. Lee Walz the pharmacy corner ot Madison avenue and McMechin streets.

Have you tried assayed denarcotized opium for making the denarcotized tincture? If not, write to Gilpin, Langdon & Co., Baltimore for a *free* sample of the drug with directions for using.

The Maryland State Pharmaceutical Association seems to be in a dormant condition, but its friends hope to revive it in the Fall. This they should do, as the good effects of such an organization cannot be overestimated.

The Alumni Association of the Maryland College of Pharmacy is in a very flourishing condition; its recent meetings have been well attended, and it bids fair to be a more popular organization with the pharmacists than heretofore.

John Purcell Dead.

John Purcell, one of the oldest, staunchest and best-known of Richmond's native citizens, and an old time member of the National Wholesale Druggists' Association, died at his home in Richmond on Friday, June 29.

He was seventy-eight years of age the 30th of last April, and all during his long and useful life he had lived in the city of his nativity.

Mr. Purcell first started in the drug buisness, when quite young, with Dr. Tompkins, a well-known druggist of that day, as his clerk.

He subsequently went as a clerk in the drug firm of Alexander Duval & Co. He was soon taken into partnership under the style of Duval & Purcell.

Some time later, in the year 1842, he withdrew from that firm and formed the copartnership of Purcell, Ladd & Co., wholesale druggists, which firm has remained unchanged in name to the present day.

The firm was then composed of John Purcell, Benjamin F. Ladd and James P. Purcell.

Mr. Purcell early in life married Miss Martha Webb, daughter of Commodore Webb of Norfolk, and she and four children survive him. They are Colonel John B. Purcell, Benjamin L. Purcell, Mrs. Thomas H. Leary, Jr., and Mrs. Alfred Gray.

MASSACHUSETTS.

BOSTON JULY 5.—"This store will close all day Sunday" is a sign displayed in Dedham drug stores on Sundays. This is the result of a special meeting held by the selectmen of that town, at which the police were instructed to enforce the Sunday law. It is understood that this action was brought about by jealousy. It seems that the electric cars have developed a large number of "railway waiting rooms" in that town all of which did a thriving Sunday business in the sale of soda and cigars. The business developed to such an extent that the police notified the proprietors of these establishments that they could accommodate the public all they pleased on the Sabbath day, but not to the extent of selling goods. Then a clamor immediately arose about the Sunday business of the druggists, and the police, to be consistent, notified the latter that they too must close, or else run the risk of prosecution. After this notice the drug stores were open one Sunday for the sale of drugs and papers, as allowed by law. An amusing incident arose on this day. One of the selectmen went to a drug store and called for a cigar; he was not accommodated, and in consequence became very angry. One Sunday of legitimate drug business was enough for the Dedham proprietors, and so they decided not to open in the future on the Lord's day. At least that is their announced intention. Druggist Smith, of East Dedham, has usually been closed the most of the time on Sunday anyway, and now all of the druggists of the town profess to be pleased by their action in closing.

Woburn has added another chapter to the history of attempts to close drug stores on the Sabbath in this State. But the result in this case stands conspicuous because its parallel cannot be found. Here the chief of police on his own authority notified the druggists that they must discontinue all Sunday business excepting that allowed by statute. This action on the part of the chief highly incensed the mayor, who, on the very day that the order was given, called the chief before him and after a stormy interview suspended him from further duty. In this action the mayor has been sustained by the board of aldermen. The step taken by the mayor cannot be looked upon, however, as being especially favorable to the druggists, but was simply the culminating point of numerous differences between the two officials. Hearing that the chief had been shorn of his power, the druggists kept open as usual, and were not interfered in any way in their business. A similar attempt at Sunday closing was made four years ago in Woburn, but like other movements of this kind it met with a complete failure. Some of the druggists of that city are much pleased at the outcome, and say that they will continue to keep open until new closing orders are issued.

A reaction has already set in out in Everett over the mayor's action in not permitting the drug stores to sell anything but drugs on Sunday. This was made apparent at a meeting of the aldermen of that city, when a resolve was unanimously adopted to the effect that, in the board's opinion, it was unwise for the mayor to issue an order restricting Sunday sales by druggists to medicines only; also that it was deemed unwise to attempt full enforcement of the Sunday laws, the same being against public opinion, and for the interest of good government in the future the mayor was requested "to revoke said order, or in some way modify the same, so that the druggists of the city may be enabled to sell certain articles which are considered by the public generally as a necessity." Three of the aldermen made speeches upon this subject. One claimed that a number of good citizens had removed from the city since the order was issued, and certainly no liberal minded persons would move in under the existing state of affairs. Another said the druggists were all respectable citizens, and conducted their business in a proper manner. The third claimed that the members of the city government were the representatives of public opinion, and he believed a majority of the people of Everett desired the drug stores open on Sunday.

A peculiar case occurred in Somerville a few days ago which has been productive of much discussion. The affair began in the arrest of Harry Niles, 14 years old, employed as clerk by F. H. Willard, Somerville avenue. Mr. Willard has another store in Cambridge. Young Niles was arrested because he had in his possession a bag containing eight bottles of ale, which he was transporting through the public streets. The complaint was for a violation of chapter 100, section 17 of the public statutes, which reads: "No person shall bring into a city or town in which licenses of the first five classes are not granted any spirituous or intoxicating liquor with intent to sell the same himself or to have the same sold by another, or having reasonable cause to believe that the same is intended to be sold in violation of the law, and any liquor transported contrary to the provisions of this section shall be forfeited to the commonwealth, but this section shall not apply to the transportation of spirituous liquor through a town to a place beyond."

Any violation of this section is punishable by a fine of not less than $50 and not more than $500, or by imprisonment for not less than one or more than six months, or both such fine and imprisonment. At the trial the police alleged that Niles was in the habit of making two trips each day to Cambridge with the bag in question, and the store where he was employed was not given a very good reputation. For the defense, proprietor Willard said that he would not allow liquor to be sold in the store, and was not aware that it ever had been. Judson A. Wicker testified that the ale was for himself and a New Hampshire friend who was visiting him; he also said that he went to Mr. Willard's Cambridge store a day or two before the arrest and before he left placed the ale and some drugs in the grip, which Niles subsequently brought to Somerville. The defendant testified that he did not know that he was carrying liquor in the bag, and never knew any to be sold in the store. He admitted that he had brought a jug once or twice from Cambridge. The result was guilty. An appeal was taken from the $50 fine.

Hon. Gorham D. Gilman of Gilman Bros., 50 Franklin street, has been appointed Hawaiian consul for the port of Boston. Of Mr. Gilman's fitness for this position much can be said. He has an experience of 20 years on the islands and an acquaintance with people in all spheres of life. During this period he visited every inhabited island of the group. Mr. Gilman has taken an active part in the affairs of this State also. He was a representative in '89 and '90, and State senator in '91-'92. He is a staunch supporter of the provisional government of Hawaii, and has become well-known in connection with these islands, both by his pen and by the illustrated lectures which he has given so many times of late.

The Massachusetts Board of Pharmacy will be in new quarters when fall examinations commence. The address of the board after Sept. 1 will be State House Annex, Rooms 21 and 22. No more examinations will be held this summer, but the new law on the license question will necessitate frequent meetings during the heated term. At the last examination 44 candidates were examined and certificates were granted to Napoleon Rogers of Haverhill, John Toye of Cambridge, Rosario E. Longtin of Holyoke, Alexis Anctil of Manchester, N H., Frank G. Johns of Holyoke, Joseph H. Beauvias of Cambridge, and Homer F. Dickenson of Springfield.

The police of Salem recently raided two drug stores in that city. One of the stores was kept by Dennis F. Hartnett, and there they confiscated five full kegs of whisky, a keg of alcohol, bottles of whisky in a barrel, and seven empty kegs. In Charles Shea's place six full kegs of beer, two boxes containing bottles of beer, three barrels containing bottles of beer and four empty kegs were seized. After these raids the aldermen of that city met and considered the question of granting licenses to druggists. There were no applications before the board, but a resolution was presented to the effect that the board deemed it inexpedient to grant any sixth class licenses for the present municipal year.

A vote on the matter resulted 4 to 1. One of the members was excused from voting, as he was himself a druggist.

These are busy times with the Low Art Tile Co. Recent purchasers of their fountains are W. E. Warren, Kennebunk, Me.; Clark and Nutten, Somersworth N. H.; C. W. Hicks, Wolfboro', N. H.; M. D. Fisher & Co., Boston; A. P. Preston, York Beach, Me.; L. B. Hubbard, Plymouth, Mass.; Herbert Burke, Malden, Mass.; G. K. Mountain, E. M. Spicer, and E. S. MacDonald, all of Boston. Other Massachusetts dealers are S. D. Wardsworth, Plymouth; S. M. Harmon Marshfield; E. Nutting, Sterling; and E. E. Poore, Lawrence.

At the annual meeting of the Mass. Medical Society held recently the most attractive exhibit was that made by the Mass. College of Pharmacy. This display contained all of the crude drugs and preparations of the U. S. P., '90, and was arranged by the students of the school above mentioned. It was proposed that this exhibit be taken to Worcester where it could be seen by those in attendance at the meeting of the M. S. P. A.

The store of L. L. Atwood, Pittsfield, was robbed in the night recently of $70. Suspicion fell on James H. Nolan, a New York drug clerk, who was spending his vacation in that city. Nolan formerly worked for Atwood, and it is claimed that his discharge was due to his thieving propensities. Nolan denies his guilt, but the police are confident that they have the right man.

Victor Taliereti of Montreal was a recent visitor to the Hub. While here he inspected the warerooms of J. W. Tufts & Co., and before he left had purchased a large double fountain for use in his store at the corner of St. Aubin and Ontario streets.

C. H. S. Wilbur has a new store at Salsbury Beach, and J. H. Carpenter has opened a new establishment at Atlantic. Both are fitted with Low Art Tile fountains.

Fred A. Barker, of Glouster, Mass., has recently made many improvements in his store on Main street. J. W. Tuft of Boston, has supplied him with a handsome soda fountain imported from Belgium, and made from the finest of Belgium marble, surmounted by a handsome light of pale glass studded with jewels, while C H. Bangs of store fixtures fame has made for him a mammouth double mahogany prescription case.

The first case under the medical practice act has just been tried and has resulted in a conviction. The "Dr." was a female and the fine was $100. It was proven that she had prescribed medicines, not having registered in accordance with the law.

The Low Art Tile Co. have recently sold the first special large fountain ever made by the concern, the value of which was $3,000, to J. W. Irving, Bridgeport, Conn

P. J. Maguire, representing J. W. Tufts & Co., has just returned to the Hub after a successful business trip through New Hampshire.

A bill to prohibit the sale or manufacture of cigarettes within the commonwealth has been passed to be engrossed.

G R. Hinckley, Brockton, is the proprietor of a new store. His fountain is of the Low Art Tile pattern.

Walter A. Claflin of Cambridge is a recent purchaser of one of J. W. Tufts & Co.'s improved fountains.

Rief and Silver, Manchester. N. H., have equipped their new store with a Tuft's fountain.

CONNECTICUT.

Dalzell and Belcher, New Britan, have opened a new store; the fountain was made by the Low Art Tile Co.

Herbert Church, proprietor of the L. W. Booth & Co. store, Bridgeport, Conn., is very ill at his home in that city.

Wm. H. Watson, who has just graduated Phm. B. from the Ontario College of Pharmacy, is now with Elbert E. Fisher, Bridgeport, Conn.

A new store has been opened at New Haven by B A. Turner. A Low Art Tile fountain occupies a conspicuous place in this establishment.

A. Marwick, Jr., is the successor of W, R. Chaffee & Co., 377 Asylum street. Hartford. A new Low Art Tile fountain is one of the additions made by Mr. Marmick.

S. W. Smith, Ansonia, has been appointed a member of the Connecticut Commissioners of Pharmacy, vice Charles Rapelye resigned. E. A. Hough, Collinsville, was first appointed, but refused on account of being postmaster.

The George Hughes Drug Company of Jacksonville is preparing to reopen at the old stand formerly occupied by Mr. Hughes at the corner of Bay and Ocean streets. The fixtures in the store, which were purchased at the assignee's sale on June 3 by Joseph Durkee, will be taken out and the store will be refitted with oak counters and shelving. Mr. Hughes will remove his stock of drugs and fixtures at the Opera House Pharmacy to the Bay street store and consolidate the two.

The following quaint order for sulphur candles was handed to Sayre & Pringle by a customer the other day. It reads:

"Seabury's sulphur candles--disinfecting and death to all animals from a chimpanzee to a nigger."

MICHIGAN.

DETROIT, July 5.—In the last fortnight business in Detroit and vicinity has materially improved, due no doubt to the hot weather. In certain lines merchants have been surpassing the records for more prosperous years. There seems to be no reason in the way of a general revival but the tariff question, and that will probably be settled shortly. The great Pullman strike has had a detrimental effect.

The drug trade is in a healthy condition. Soda fountains are worked from morning until far into the night, and the large amount of sickness in the city has favored the trade. During the small-pox scare some 100,000 vaccine points were sold, which has been stimulating in effect. Everybody has hung out cut rate signs, but little if no difference has resulted. Patent medicines are the only lines effected.

J. B. Young, Detroit, has obtained new quarters at 750 Grand River avenue.

J. P. Halls, of the west end drug store, Windsor, was recently married to Miss Lillie Hatch.

John E. Gibbs & Co. have purchased the stock of H. E. Girard, 120 Monroe street, Grand Rapids.

Dr. Riopells' drug store at 153 Canfield avenue, Detroit, was damaged by fire last week. Loss $800. Insured.

The drug firm of Gidley & Boltze, Ellsworth, Mich., has been dissolved. R. Gidley will continue the business.

The drug store of Charles Weeks, at Augusta, has been robbed of a large sum of money and a quantity of stock.

The *Detroit Journal* recently published an excellent likeness of F. K. Stearns, president of Frederick Stearns & Co.

The wife of W. F. Jackson of Detroit, died recently. The remains were interred at her old home, Ann Arbor, Mich.

Abraham Greenfield, Detroit, has transferred his stock of drugs at 454 Rivard street, to Moses Stere. Consideration $300.

The drug and grocery firm of Dunlap & Company, at Springport, Mich., was last week closed up by parties from Eaton Rapids.

Muir & Company of Grand Rapids, Mich., have enlarged the capacity of their store by putting in a mammoth onyx fountain.

R. H. Elliot, a prominent druggist at Pontiac, died recently. He was 56 years of age, and had been in the business many years.

The employees of Park, Davis & Co., held their annual picnic not long since at Sugar Island. Over 1,000 people enjoyed the fun.

W. H. Burk, of W. H. Burk & Co., was in Ann Arbor last week on business and to attend commencement exercises at his Alma Mater.

Charles Barfoot, a young man employed at Williams, Davis, Brooks & Co., fell down the elevator shaft. He smashed his skull and died a few moments afterward.

Harry Longwell, of the firm of Longell Bros., Paw Paw, Mich., druggists, died last week at Martinsville, Ind. He was one of the most prominent and well-known business men in that city.

A clerk in the drug store of Thomas Slattery, Benton Harbor, accidentally dropped a lighted match into the showcase window filled with fireworks. About $300 worth of goods were destroyed.

The penny-in-the-slot machines which were on the cigar counter of nearly every druggist were recently declared gambling devices, and ordered removed. Their disappearance has been quite general throughout the State.

T. H. Hinchman & Sons, wholesale druggists, are again back in their old quarters in Jefferson avenue. While many familiar things are missing the firm express themselves as well pleased to be back again. They were burned out several months ago.

Frederick C. Reame and James M. Carmichael have secured an injunction from the Circuit Court restraining Daniel O'Leary, Edward A. Waterfall, W. P. and J. W. Doty from selling or disposing of the stock of drugs at 284 West Warren avenue, Detroit.

Stanley E. Parkill, Secretary of the Board of Pharmacy, reports that at the examination held last week at Star Island, 83 candidates presented themselves for registration as registered pharmacists and eight for assistant pharmacists. The following first-class certificates were granted: L. D. Bates, Burnside; M. Benjamin, Detroit; E. L. Bridges, Rochester; W. B. Lusen, Pontiac; J. L. Tegarten, Ann Arbor; A. B. Thompson, Hudson; D. L. Treat, Adrian; H. B. Ward, Detroit; and S. Zeller, Sault Ste. Marie. Assistants: D. L. Livingstone, Detroit, and E. E Sherrard, Detroit. The next meeting of the board will be held August 25 at Haughton, Mich.

The School of Pharmacy of Michigan University in Ann Arbor held their class day exercises last week. This is the first class day ever held by the pharmacists, and the class of '94 feels no little pride over the innovation. There are 65 students in the school and 25 graduates in this year's class. The following were given diplomas: R. S. Armstrong, C. E. Burnhart, A. W. Epley, Lovell Farnum, S. R. Knox, J. C. Maxwell, J. C. McGregor, Grace E. McNoah, A. H. Mead, T. E. Murdock, Marion F. Nichols, Delia O'Connor, F. L. Robertson, James Seymour, G. C. Steventon, J. L. Tegarten, C. O. Topping, C. H. Williams, P. E. Wise. L. D. Havenhill, master of pharmacy.

Frank C. L'Hommedieu, of the firm of Bassett & L'Hommedieu, died of consumption at his home, 105 Alfred street. He was 44 years old. He was born in New York and came to Detroit in 1869, and entered the employment of the wholesale drug house of Farrand & Sheley, afterwards Farrand Williams & Co. He remained there until six years ago, when he became associated with Mr. Bassett. His health began to fail in 1892, and much of his time has since been passed at Tucson, Arizona, in an effort to restore it. Hope was abandoned last month, and he returned home. Mr. L'Hommedieu was married ten years ago. Three children and a wife survive him. He was widely known in business and society circles, and was a member of the First Presbyterian Church Society.

OHIO.

CINCINNATI, July 5.—The leading theme among local druggists of late has been an attempt to have a new pharmacy law framed for this State. A number of the leading pharmacists, together with the various members of the college of pharmacy faculty, have held several conferences in regard to the matter, but as yet nothing definite has been done. There is no end of righteous indignation existing among the members of the craft on account of the action of the Hamilton County delegation in the Legislature for the action they took in the attempt to pass the iniquitous Abbott bill, about which so much has recently been written. The claim is made that that august body in session at Columbus traded votes in a wholesale manner. Invidious people also claim that Senator Abbott, the farmer statesman, was not actuated by a desire to benefit the drug business by the introduction of his pet measure, making the existing pharmacy law more lenient. It is said that he has an intimate friend who is one of his constituents, and who failed to pass an examination as a pharmacist before the Board of Pharmacy. Fully ninety per cent. of the druggists of the city and suburbs are opposed to the passage of the measure, while a mere handful express themselves as favorable to the bill, giving as a reason that the members of the State Board of Pharmacy have shown favoritism in the examination of applicants for registration. The Abbott bill is now pending in the Legislature, and will likely not be brought up until the next session of the General Assembly. Apropos of the trouble and annoyance caused the local druggists to prevent interlopers from other States who are not qualified to run drug stores coming here, the above action was started. The idea is not to amend the present law, but to have an entirely new one passed, which will give the retail druggists the protection they merit.

Ed. Gray of Fifth and Main streets is able to be around again after a severe siege of typhoid fever.

Briggs Jones of Greenville, O., is clerking at the Kylius Pharmacy, corner of Liberty and Denman streets.

The Peck Drug Company which was recently organized in Toledo, O., has been reorganized under the name of the Toledo Drug Co.

W. Wagstaff's drug store in the Richard's block, Ashtabula, O., is about ready for business. It is elegantly fitted throughout, and a fine stock has been put in.

Dr. Louis Sauer of Central avenue and Baymiller street received a pair of boots a few days ago which had been sent to almost every town and village along the route of the American Express Company.

Al. Beehmer of 8th and Central avenue, whose marital troubles have been published in the daily papers from time to time, has been granted a divorce from his wife. The decree was granted only a few days ago.

Gus. Weisbrodt, the Middletown druggist, who was sentenced to the penitentiary one day last week for embezzling $30,000 from that city while acting as treasurer, will have charge of the drug room at the Columbus prison.

One day last week Louis Kusnick swallowed a bristle from a tooth brush which caused him much annoyance and no little pain. It required the services of two skillful physicians to extract the troublesome bristle from the victim's throat.

George W. Kylius, who conducts the pharmacy at Liberty and Denman streets, and is one of the studious men of the local drug trade, has purchased an extensive library. He now spends his evenings at home in the midst of his interesting family.

Will S. Wagner, who has been the chief prescription clerk at Weatherhead's pharmacy for a number of years past, has bought the Dehner Pharmacy, corner of 7th and Vine streets. The store will be restocked and refitted with elegant new fixtures.

Ed. P. Dehner, who recently failed in the drug business at 7th and Vine streets, has resumed his old position at the Weatherhead Pharmacy, corner of Sixth and Vine streets. He has a host of friends who hope to see him again the owner of a store.

Assistant Food and Dairy Commissioner J. J. Luebing is making matters extremely interesting for the local druggist and grocers. He claims that the latter are selling a brand of extract of vanilla that is nothing more or less than burnt sugar or caramel.

"Uncle" John Keeshan, the veteran druggist, who is nearing his eightieth birthday, is getting to be a great horse fancier. Almost every afternoon during the present nice weather he can be seen driving out the avenue behind a team of spirited equines.

There is to be an elegant new pharmacy at the head of the Sycamore cable street railroad. The store is to be located in a magnificent new flat building to be built by a well-known capitalist, and is to cost $50,000. W. H. Adderly is to open the new store.

John F. Haines, the well-known druggist, who has been identified with a number of the prominent down town stores, is now one of the traveling salesmen with Lehn and Fink of New York. He was here last week mingling with his many friends.

Ed. Bachus, a well-known Cincinnati drug clerk, who has been identified with a number of the leading pharmacies, is soon to open an up-to-date drug store at Freeman avenue and Everett street, just opposite the Armory. Bangs will furnish the fixtures.

Wilmot J. Hall, the owner of two drug stores in this city, and joint proprietor of Forbes' Diastate has, returned from an extended trip through the South, where he went for the benefit of his health. Mr. Hall's accounts of the growing South were very interesting.

George Budde, the hustling salesman in charge of the sundry department at the Stein, Vogeler Drug Company, made a flying trip to Dayton one day last week. He reports business in the Gem City as on the boom. He will make weekly trips to that city in the future.

Andrew W. Bain, ex-president of the Cincinnati College of Pharmacy, and one of Cincinnati's leading pharmacists, is again behind the prescription counter at Weatherhead's store. Mr. Bain has two inventions with which he soon expects to startle the pharmaceutical world.

Fred. Kisker, who owned a pretty little drug store in Fairmount for a number of years, has closed out his business and is now clerking for John D. Otis and Company. Everbody in the West End knows him, and he will make a valuable man for his new employers.

Harry Dinsmore of Governor Mc Kinley's office in Columbus, who was for a number of years a drug clerk of this city, was around shaking hands with his local friends one day last week. While here Harry received an offer to travel in Ohio for a leading druggists' sundries house.

There seems to be a quiet race on between two well-known druggists for the nomination for coroner at the coming Spring Republican convention. Dame Rumor has it that Drs. John C. Otis and Charles F. Wocher both covet the nomination. They are both very popular gentlemen, and will doubtless make a manly fight for the plum.

Domestic Remedies in Wisconsin Defined.

The Wisconsin Board of Pharmacy have adopted the following definition of "Domestic Remedies," which it may be noted has been sustained by the Supreme Court of Illinois :

The State Board of Pharmacy has defined the "Usual Domestic Remedies" that may be sold by grocers and general stores under the provision in section twelve, pharmacy law, as—

Copperas, Sulphur, Saltpetre, Rosin, Glauber salts, Oil of Turpentine, Sal soda	To be sold as stock remedies only.
Aqua ammonia, Soda ash, Borax	For washing and soap-making purposes only.
Ammonia, carbonate of, Soda, bicarbonate of, Cream of Tartar	For domestic use only (not medicinal).
Castor oil	For lubricating purposes.

The sale of ordinary drugs and medicines by other than a registered pharmacist is provided for in section twelve, pharmacy law. Such articles as quinine, epsom salts, castor oil, paregoric, spirit of nitre, sulphur, saltpetre, and all other ordinary articles of drugs or medicines (not poisons) used for medicinal purposes, may be sold by general stores if put up in sealed packages, and properly labeled by a registered pharmacist of Wisconsin (the label should have the name of registered pharmacist thereon, and the words "Registered Pharmacist of Wisconsin, certificate No. —," with proper directions for use thereon). The sale of these articles put up by wholesale druggists or manufacturers not registered pharmacists in Wisconsin, is not legal under the pharmacy law.

MISSOURI.

ST. LOUIS, July 6.—The annual meeting of the Missouri Pharmaceutical Association, held at Excelsior Springs, June 12 to 15 inclusive, is still talked of among the St. Louis druggists as one of the grandest events of the year. Some of the stay at home St. Louis druggists are now snarling that they would have gone to Excelsior Springs had they known the meeting was going to be such a success. A delegation of about thirty members went from St. Louis, among them were three professors of the St. Louis College of Pharmacy, namely, Messrs. J. M. Good, Francis Hemm and Dr. H. M. Whelpley. The only St. Louis wholesale drug houses represented at the meeting by members of the firm were the Hopkins-Weller Drug Company and the J. S. Merrill Drug Co., the former by George K. Hopkins and his son Geo. E. Hopkins, the latter by George R. Merrill. Traveling salesmen were present from all wholesale houses in the state. Much dissapointment was expressed on account of the non-attendance of Mayor Walbridge of St. Louis, who is also President of the J. S Merrell Drug Company. St. Louis delegates received a lion's share of the honors. Dr. Whelpley was re-elected secretary, Ambrose Mueller assistant secretary, Prof. Francis Hemm was appointed chairman of the committee on drug adulteration, G. H. Chas. Klie, chairman of the committee on papers and queries, Dr. C. O. Curtman, chairman of the c mm ittee on pharmacopœia, Geo. A. oHopkins, vice-chairman of the committee on entertainment, Otto Claus, chairman of the committee on transportation, Hon. C. P. Walbridge, chairman of the committee on trade interest, H. F. A. Spilker, chairman of the committee on legislation. Other St. Louis members were given prominent positions on the various committees and delegations. St. Louis members also came in for a a good share of the prizes. This included those offered for entertainment features as well as papers, spelling contests, etc. One of the most interesting papers read at the meeting was a report by Dr. Curtman of St. Louis, chairman of research committee "B," of the U. S. pharmacopœia revision committee. The doctor went on to show in this paper how every formula and test, as well as the reagents, for the pharmacopœia of 1890 are now being thoroughly tested by this committee, so that the next pharmacopœia will undoubtedly be very nearly perfect. [See page 10.]

The St. Louis College of Pharmacy is talking of extending their course to three years.

The leading medical colleges of this city have mapped out a four years' course for the near future.

C. F. G. Meyer, president of the Meyer Bros. Drug Co., sails for Europe the fore part of July.

J. M. Borton, one of the St. Louis druggists, is studying law. He looks more like a judge than a druggist.

C. C. May of this city has recently opened one of the finest drug stores in the city at 3000 Washington avenue.

E. J. Schall, manager of the patent medicine department of the Meyer Bros. Drug Co., has been quite ill, but is now able to be at his desk again.

Dr. H. W. Kohler recently sold his drug store at 1807 South 7th street, and on the 5th of July he and his wife sailed for Europe, where they will spend the summer.

All the wholesale drug houses of St. Louis close at one o'clock on Saturday, and it is noticeable that the employees do not care to linger around long after the hour for closing.

At present writing the railroad strike and boycott is seriously affecting the wholesale drug trade of this city. The railroads are refusing to receive freight from these houses.

D. W. Rockwell, druggist at 7th and O'Fallon streets, made an assignment the fore part of the month. The Meyer Bros. Drug Co. bought the stock and sold it to parties living in the southern part of this state.

Dr. J. C. Falk, secretary of the St. Louis College of Pharmacy, now wears a sleepy look but a happy smile since the appearance in his household, on June 13, of a very young druggist by the name of Oswald Pleus Falk.

Otto P. Meyer, manager of the Meyer Bros. Chemical Laboratory, was married on the 6th of June to the belle of Grand Rapids, Mich. The happy couple attended the meeting of the Missouri State Pharmaceutical Association.

The medical colleges of St. Louis, with which we are blessed with eleven —if such a thing is a blessing—have all gotten out their catalogues for this year. Some of the colleges make special bids for Missouri pharmacy students.

Dr. L. H. Behrens is an ex-drug clerk who graduated at the Missouri Medical College last spring, and is now one of the internes at the City Hospital. He is getting along nicely there, and prospering about as most druggists who study medicine do.

A canvass of the wholesale houses of the city shows that business is slowly but surely improving. This is usually the dull season of the year, but they claim there has been a steady increase of business for the last sixty days and no signs of a change for the worse.

Theo. W. Meyers, who until recently was traveling salesman for the Cleveland Linseed Oil Co. of Cleveland. O., was recently arrested on our streets, charged with defrauding the Meyer Bros. Drug Co. and the Moffitt-West Drug Co. of this city, by getting them to honor bogus drafts. The case is now pending in the courts.

Dr. Frank L. James, editor of *The National Druggist*, departs in a few days for an extended visit through the South. He will spend a good share of his time down on the Gulf, fishing and bathing. Full particulars as to the number and size of the fish caught will no doubt be given by the doctor through the editoral columns of his journal.

A young St. Louis physician recently called upon his druggist to know if he could procure for him a new and wonderful rheumatic remedy which he had just discovered, and which he knew by the name of Kerosene. The druggist, who is noted for his keen eye for business, told the physician he could furnish it to him but it was rather expensive. The result was the physician left the store with four ounces of this new anti-rheumatic, for which he had paid fifty cents, and went to his office much pleased with his success in being able to procure the new remedy. He never once mistrusted that it was the ordinary coal oil of the market.

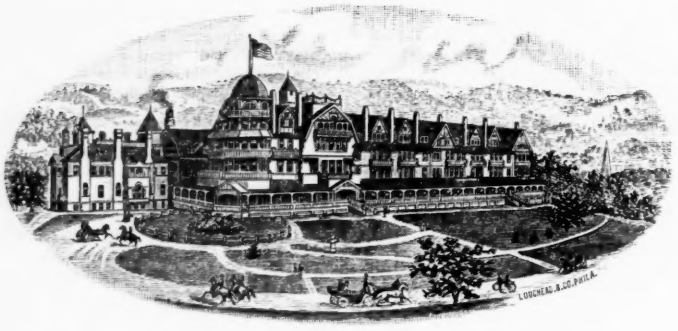
The St. Louis Drug Clerks' Society, which for some time past has existed only in name, has recently been imbued with new life, and is now what the boys call a howling success. At their last meeting held June 21, twenty new names were proposed for membership. They now hold regular meetings every month, and at their last meeting a committee, with Charles F. Geiger as chairman, was appointed to be known as the program committee. The name of the chairman of this committee is sufficient to insure the best programmes in the future. Four committees of two members each were also appointed to thoroughly canvass the city in the interest of the society. Besides the moral requirements, a drug clerk must be registered in the State of Missouri before he is eligible to membership. The object of the society is to bring the drug clerks of the city together for professional improvement and social enjoyment, and with S. E. Barber at the helm, Otto F. Mack, secretary and Frank Garthoffner in charge of the finances, the St. Louis Drug Clerks' Society promises to be one of the best organizations of its kind in the country.

The Illinois Board of Pharmacy examined a class of 98 at their meeting in Chicago, June 12–15, 1894. The following passed as registered pharmacists: H. A. Berkey, T. Cupit, Jr., W. H. Dayton, M. P. Ellis, J. B. J. Hoeferlin, R. W. Hull, G. A. Jacob, H. J. Kamps, J. E. Klenze, W. Kramer, H. B. Museus, R. W. O'Brien, O. G. Rahlfs, G. H. Rahlfs, H. P. Sandkoetter, A. M. Smith, N. C. Unseth, L. G. Volkmar, H. H. Vollmer, A. G. Wegener of Chicago, F. C. Deutsch, Bloomington; H. M. Ferguson, Gardner; E. Flagg, Clarence and A. J. L. Schroeder, Quincy. The next regular meeting of the board for examination will be held at No. 173 39th street, Chicago, September 4, 1894. For further information address Frank Fleury, Secretary, Springfield, Ill.

Frank T. Green, of San Francisco, tells of a customer who called at his place of business and asked for Helmbold's Rose Wash, or Helmbold's Buchu, put up in the old style. It seems the customer wanted the medicine for the revenue stamp, as he said he had succeeded in buying some and had sold the proprietary stamp for $16. Some time after the war, the Government issued a large number of revenue stamps for proprietary medicines, toilet articles, etc. Some fifty or sixty of the former had special stamps made, and those are very valuable. They have a regular catalogue price. Anything over four cents is worth considerable money.

Read the "trade notes" and the market review every week if you want to keep posted.

The American Pharmaceutical Association Meeting.



A. P. A. MEETING AT ASHEVILLE.—BATTERY PARK HOTEL.

The Forty-second Annual Meeting will be held at the Battery Park Hotel, Asheville, N. C., the first session opening on Monday, September 3, 1894, at 10 o'clock A.M.

Two years ago the A. P. A. met along the rugged mountains of New Hampshire; this year you are called to meet among the verdure clad and far more beautiful mountains of the Blue Ridge in the "Land of the Sky." It is earnestly hoped that as many as can possibly do so will arrive on Saturday and Sunday, September 1 and 2, as those delaying their arrival until Monday will lose the greater part of the day.

The train from Salisbury, Washington and the North is due in Asheville at 4 P.M., that from Atlanta and the South at 11 P.M. Passengers from the West can also come by way of Atlanta arriving at 11 P.M. A committee will meet all visitors at the trains and assist them in procuring such accommodations as they desire. The Battery Park Hotel (the official meeting place of the Association) will accommodate all delegates, members and friends at the special rate of $2.50 per day; the Swannanoa, $2 to $2.50 per day; the Oakland Heights, $2.50 per day; there are numerous first class boarding houses with rates of from $1 to $2 per day.

The local committee have prepared the following:

PROGRAMME.

MONDAY, September 3.

10 A.M. Council Meeting.
3 P.M. First General Session.
8.30 P.M. Reception.

TUESDAY, September 4.

9 A.M. Second General Session.
3 P.M. Section of Commercial Interest.
8.30 P.M. Entertainment.

WEDNESDAY, September 5.

9 A.M. Section on Scientific Papers.
3 P.M. Carriage Drive.
8.30 P.M. Section on Scientific Papers.

THURSDAY, September 6.

9 A.M. Section on Education and Legislation.
3 P.M. Section on Scientific Papers.
8.30 P.M. Section on Commercial Interest.

FRIDAY, September 7.

9 A.M. Section on Education and Legislation.
1 P.M. Excursion to Hot Springs.

SATURDAY, September 8.

9 A.M. Final Session of Association.

The carriage drive on Wednesday will include a visit to the magnificent country seat of George Vanderbilt, whence a magnificent panorama is laid before the visitor, which is described by the committee as follows:

Here your eyes are opened in wonder at the vast work that is in progress. The road winds along the banks of the Swannanoa, through the nurseries and well-kept fields, and shortly comes out upon the macadamized approach road, about three miles long, leading up to the mansion. All that art and nature combined could furnish has been used to make this road beautiful. A rippling stream bridged innumerable times by handsome stone arches sparkles forth here and there.

It would be useless to attempt to give one an adequate idea of the stupendous work in which Mr. Vanderbilt is engaged, and suffice to say that the mansion is hardly completed, and the work on the grounds (8,000 acres in extent) is in an even more unfinished state, and that with $4,000,000 already expended, it is estimated that six millions will be necessary to complete the work. Leaving the Vanderbilt estate the drive continues up the Swanannoa, by the picturesque Kenilworth Inn, over Beaucatcher Mountain and back to the hotel. From Beaucatcher Mountain a view fully as beautiful as from Vanderbilt's is to be had, though here the city is spread out at our feet, the mountains in the background.

Rhodedendron, lilies, and fragrant shrubs and grasses lend perfume to the air, and one can almost imagine himself inside some immense green house. As the carriages advance, broad vistas of green open on every side, with here and there a glimpse of the distant mountains. Finally the end is reached, and at the top of a commanding eminence we alight and gaze in rapture at the beautiful panorama spread out before us. The French bread is at our feet; Asheville—beautiful in the distance—is behind us; away to the west are the balsam, blue and indistinct in the soft autumn haze. Nearer still is Pisgah and the far-famed "Rat," 5,700 feet high, and looking for all the world like some volcano, extinct and solemn in a peaceful landscape. Away to the north are the Smoky Mountains and Tennessee. A little to the right the Graggies and the Blacks, Mount Mitchell, historical as the resting place of Prof. Elisha Mitchell, and the highest land east of the Rockies, towering grand and majestic 6,770 feet above the sea. To the east the Blue Ridge stretches in a wide circle, a background of this beautiful panorama. From where one stands, a stretch of the country 40 miles across is before the eye—mountain and valley, river and plain, civilization and nature in her wildest and grandest forms, side by side.

The Battery Park Hotel, which is illustrated herewith, is one of the most elegantly operated and favorable located hostleries in any of the mountain resorts of the United States.

Henry R. Chears of Plymouth, N. C., ex-president of the North Carolina Pharmaceutical Association, is an active and enthusiastic member of the committee on entertainment, and has enlisted the aid of Polk Miller, president of the Polk Miller Drug Co. of Richmond, Va., who will favor the pharmacists with some of his inimitable recitations depicting the old time ante-bellum darky.

The committee on transportation will announce the details of the plans later. The usual one and a third fare will no doubt be conceded. This committee is composed as follows:

COMMITTEE OF TRANSPORTATION.

Caswell A. Mayo, 37 College Place, New York, chairman; S. A. D. Sheppard, Boston, Mass.; W. J. M Gordon, Cincinnati, O.; A. K. Finlay, New Orleans, La.; Henry Sharp, Atlanta, Ga.; A. E. Ebert, Chicago, Ill.; Chas. M. Ford, Denver, Col.; M. W. Alexander, St. Louis, Mo.; Wm. Searby, San Francisco, Cal.

RANDOM NOTES.

Doctor Harry Winston Harper of Fort Worth City, has been elected professor of chemistry at the Texas University. Dr. Harper was born at Boonville, Mo., 35 years ago.

Frank Shaw has purchased Brokaw's Union Depot Pharmacy at St. Joseph, Mo.

L. N. Fenne has sold his drug store in Waukegan, Ill., to George Roberts, of Chicago.

O. Wohlen & Son have opened their new drug store in Centreville, S. D., for business. It is under the charge of Dr. T. J. Sheehan as pharmacist.

The Enterprise drug store, Lakeview, Mich., has been established twelve years. O. W. Vining is proprietor, and has long been a resident of the town.

Stream & McCammon, of Des Moines, Ia., are getting on nicely with their improvements, and when completed the "True Druggists" will have about the nicest store in Iowa.

Jacob Rossback, who is widely and favorably known to the drug trade, and who for fourteen years has been with Drake Bros., Milwaukee, Wis., anticipates opening a drug store of his own in that city shortly.

E. B. Heimstreet, of Janesville Wis., has offered his drug store for sale, and is said to contemplate establishing a large sanitarium in one of the towns in the southern part of Wisconsin, with Dr. Robert A. Kitto of Racine at the head.

Waite & Wicker, druggists, of Coldwater, Mich., have improved the interior of their store in a manner that adds greatly to its appearance and convenience. Plenty of space has been given to the lovers of good soda, and the arrangements of cases, counters and display goods are made in the best of taste.

FOREIGN NEWS NOTES.

Large and rich deposits of nitrates are said to have been discovered in upper Egypt.

The use of the metric system of weights and measures has been made obligatory for physicians and pharmacists in Russia

The combined German manufacturers of salicylic preparations have reduced their prices, both for domestic and export consumption.

A German national food and health exhibition will be held at Kiel from August 4 to 19, which will include exhibits of disinfectants, chemicals, perfumery, surgical appliances, etc.

The fifth annual meeting of the Bavarian apothecaries was held at Munich from the 16th to the 19th of May. The principal interest of the meeting centered in the discussion of the question of "personal concession" as applied to pharmacy.

It is stated that Germany now produces 90 per cent. of the world's output of alizarine and 75 per cent. of that of anilinedye. The United Kingdom, Switzerland, and France share almost the whole of the remaining 10 and 25 per cent. between them.

President Diaz of Mexico has granted a concession to Scott & Bowne to build a glass factory at Tacubaya, a suburb of the City of Mexico. This step has been taken so as to avoid the payment of the excessive duty which is exacted on drugs in bottles.

Of the 63,000 roubles annual income necessary to conduct the proposed medical college for women in St. Petersburg, 43,000 have already been secured. The State is to furnish buildings and to open the State hospitals to the students for clinical purposes.

The suit of the German chemical firm of Dr. F. v. Heyden Nachf., at Radebeul, near Dresden, for the annullation of the saccharine patent of Fahlberg List & Co., in Salbke-Westerhüsen, was dismissed with costs on June 9 by the Reichsgericht at Leipzig, the highest German court of law.

A monument will shortly be placed over the grave of the late Professor A. W. von Hofmann, in the Dorotheen cemetery in Berlin. The monument will bear a marble bust of the deceased scientist, sculptured by Schaper, from a model made on the occasion of von Hofmann's seventieth birthday.

Professor Wulling, of the University of Minnesota, has reached the historic city of Edinburgh in his travels, and we gather from a recent issue of the *British and Colonial Druggist* that he is making himself familiar with the workings of the British pharmaceutical institutions. He was present at the last meeting of the North British Branch of the Pharmaceutical Society of Great Britain, and took part in the proceedings.

The village of Schmargendorf, in Prussia, is not rich or populous enough to support a pharmacy, but it is situated miles from anywhere, and the inhabitants are very anxious to have access in their midst to pharmaceutical aid. To supply this want the authorities have ordered the apotheker at Deutsch-Wilmersdorf to keep a branch shop at Schmargendorf. At first the apotheker, expecting nothing but loss from the venture, refused, but being told that, if he persisted in that attitude, his licenses for branch shops in other more prosperous villages of the district would be cancelled, he reluctantly consented.

We are much grieved to learn of the serious illness from cardiac inflammation of the accomplished associate editor of the London *Chemist and Druggist*. Peter MacEwan, Ph.G., F. C. S., is known in this country to others besides the readers of his interesting and versatile weekly. He paid a visit to the United States in the early Fall of 1892, and made many friends among men prominent in teaching institutions and business. He is a fine type of the lowland Scotchman, being short in stature, with clear blue eyes and sandy complexion. In speech and manner he is slow and cautious, and greatly prone to his countrymen's trick of "takin' a man aff." But as his friend Barrie would phrase it, he is just as "quick in the up-tak," so he counts his friends without number throughout the entire length and breadth of the "kingdom."

Trade Notes.

Write to Gilpin, Langdon & Co., Baltimore, for enough opium to make 100 Cc. of denarcotized tincture of opium free.

There is no live druggist who will not take advantage of the "One year's time offer of the Eureka Chemical Co. of Detroit for their genuine pennyroyal wafers." You lose that many sales in a year by not having them in stock aside from the sales natural to result from your own effort to accommodate those who ask for a "Monthly Regulator" that will give a result.

The Royal Malt Extract Co. have built up a large business in Philadelphia through the efforts of their energetic salesman, D. E. Bransome, and the excellent quality of their malt. One prominent druggist on Chestnut street sold over 315 gross within the past year. Mr. Bransome informed one correspondent that notwithstanding the dull times his daily orders for malt extract is increasing.

Portsmouth Lavender Salts.

The accompanying illustration shows the new container in which the popular Portsmouth Lavender Salts are now offered to the public. It is just the thing for travelers, as the screw cap which fits over the stopper prevents the contents from being spilled. The new style was exhibited at the recent meeting of the Massachusetts Pharmaceutical Association at Worcester, and if complimentary remarks count for anything the people of Massachusetts are going to hear of the "Portsmouth." Price in the trade, $2 per dozen.

Medals at the Venice Exposition.

Messrs. Burroughs, Wellcome & Co. have been awarded a grand diploma of honor and a gold medal for their goods at the International Exhibition of Inventions, which is now being held in Venice. They have decided to present their entire exhibit, at the closing of the Exhibition, to the hospitals of the city. Foods and hospital and military supplies are very prominent at the Exhibition, which is located in the building erected for the first International Exhibition that was held in Vienna. It is called the "Rotonda," and has in the center the largest dome ever constructed. All the space has been taken, and the whole Exhibition is crowded with handsome exhibits from every corner of the earth.

A New Sterilizer.

Joseph G. Taite's Sons' Sterilizer consists of a boiler, a frame for eight bottles, a hot water can, nine 8-ounce

graduated nursing bottles with rubber corks and glass stoppers, a brush or bottle cleaner, and six bottle drainers, packed in a neat wooden box.

We would call attention to the shape of the bottles, which are oval and not round. They have adopted this shape because of the universal approval of an oval bottle for nursing.

They are made of the best annealed white glass and have gracefully curved necks, making them easy to clean and drain, and are graduated in ounces and half ounces.

The bottle drainers are very simple in construction, and can be hung either inside or outside the boiler. Write for prices to Joseph G. Taite's Sons, Office and Factory, Twelfth, Fitzwater, and Beckwith streets, Philadelphia, Pa. Mentioning this Journal.

Glycerin at the Midwinter Fair.

The W. J. M. Gordon Chemical Co., of Cicinnati, have received notice from the Midwinter Exposition as follows:

SAN FRANCISCO, JULY 3, 1894.

TO THE W. J. M. GORDON CHEMICAL CO.
Midwinter Exposition awarded you the first premium for Glycerin conveying gold "medal."

This is a continuation of their success in obtaining the highest awards for their glycerin in every exposition that they have exhibited, and merely confirms the prevalent high estimate of the quality of Gordon's glycerin.

Drugs Set to Rhyme.

With the object of furnishing some aid to memorizing the statements and formulas of the British Pharmacopœia, one of our clever English contemporaries, *The Chemist and Druggist* has instituted and offered prizes to the successful contestants in a rhyming competition.

We give below a few of the verses submitted in competition :

ADEPS LANÆ.

Mary had a little lamb
With wool upon its back,
To which adhered an unctuous balm—
Impure cholesterin fat.
When purified its names are many :
The B. P. has it adeps lanæ.

Antipyrin and the synthetic remedies yield several clever verses. It was a bold experiment to set them to music.

ANTIPYRIN.

Phenyl-dimethyl-pyrazolone,
From phenyl-hydrazin obtained, phenazone,
Colorless crystals, inodorous, scaly,
Which chloroform, spirit, or water solves freely.
The doses official are three grains to twenty,
But chemists experienced say ten grains are plenty.

PHENAZONE.

By nitrous acid salts of aniline
Are changed to salts of diazo-benzene ;
Sulphurous acid, thirdly, changes this
To phenyl-hydrazine, whate'er that is ;
And thence, by paths, to heaven only known,
Comes phenyl-dimethyl-pyrazolone.

CALCII CHLORIDUM.

Calci chlor. may be formed, as anyone can tell,
By neutralizing calcii carb. with a little HCl.
Then add a little solution of chlorinated lime
And calcii hydras, too, a little from time to time,
Filter and evaporate until a solid's made,
Dry at 400 Fahrenheit (204 Centigrade).

CAMPHOR.

Stearoptene from the *Cinnamomum* wood,
From China and Japan imported crude.
The product of the first rough distillation
Is purified at home by sublimation ;
On water floats, though in it melts but slightly,
And with a flame that's smoky burns brightly.

EXT. BALÆ LIQUIDUM.

[The only official preparation of belæ fructus.]
"Bael fruit ! bael fruit ! have you a home ? "
"Yes, in extract belæ liquidum."

THE GREEN EXTRACTS, B. P.

When bruised the verdant juice exudes. Just heat
it by "degrees"
You'll find that one-and-thirty frees the chlorophyll with ease.
The heat, increased by thirty more, plus thirty
more and ten,
Coagulates and separates the useless albumen.
Then concentrate the filtrate, add the chlorophyll
so green,
And stir at one-and-forty till a true extract is seen.

INF. GENT. CO.

Orange-peel and gentian-root,
With fresh-cut lemon-peel to boot,
Boiling water o'er them pour,
Let them stand for half an hour;
If this little rhyme you know
You can make inf. gentian. co.

LIQUOR CALCIS SACCHARATUS.

Liquor calcis saccharatus :
Take of lime well slaked one ounce,
Then of sugar well-refined
Take the double for the nonce ;
Triturate, then slowly add
Aqua destill. twenty ounce.

THE MAGNESIAS.

If mag. carb. lev. you wish to make,
Cold dilute solutions take ;
But mag. carb. pond. is not thus got—
Use strong solutions boiling hot,
By heat now loose carbonic's bond
To get magnesia lev. et pond.

The muse takes kindly to the misturæ, especially to the mist. spirit. vini gallici.

MIST. FERRI CO.

Mist. ferri co., I'd have you know, requires some
care in making.
Take sacchar. alb., pot. carb., and myrrh ; please
grasp the situation.
And in a mortar subject them to careful trituration.
Next aqua rosæ gradually add secundum artem.
(The ferri sulph in some of which dissolve before you
start 'em.)
Then add the nutmeg spirit, and mix the whole
with vigorous shaking.

MIST. FERRI CO.

Potass. carb. and sacchar. album,
Myrrh and aqa rosæ
Ferri sulphas last shall come :
Nutmeg makes it "nosey."

MISTURA OLEI RICINI.

Mix ol. limon. and caryoph. with six of castor ol.,
To these add twenty minims of B. P. potassa sol.
Pour in the syrup, and another third of liquor pot.
Half the aqua flor. aurant., then the remaining lot
Of alkali solution ; and the last thing you must do
Is to add the orange-water till the product's ounces
two.

MIST. SPT. VIN. GALL.

Rub up two yolks with half an ounce
Of powdered sugar fine,
Then add, sed grad, four ounces each
Of the water and the wine.
The product, every chemist knows,
Is Peter Squire's "delicious dose."

MORPHINE.

From bitter tears that Asian poppies weep
(The death-pale angels of the powers of Sleep),
Won by an art than poet's nobler far,
Behold how fine these silvery needles are !
In each a spell Lethean slumbering lies—
Ease for pained limbs, rest for grief wearied eyes

OPIUM.

'Tis the juice of the poppy inspissated
When fresh it is plastic, 'tis bitter when tasted ;
Imported in "lumps" which may once have been
round,
And weighing some under, some over a pound.
These lumps are covered with little brown specks :
The fruit, says B. P., of a kind of Rumex.

PEPSIN, B. P.

When you see a healthy sow, chase her till you've
caught her.
Open with a knife, and lay the carcass on a board ;
Remove from stomach food and dirt, and cleanse
with little water.
Scrape away the viscid pulp with any old blunt
sword.
Dry the pulp on pane of glass, or earthenware that's
white,
Keeping temperature below 100 Fahrenheit.

PHOSPHORUS.

Phosph'rus melts at one-one-naught degrees of
Fahrenheit,
A little o'er its melting-point then in air it doth
ignite,
Burning with a luminous flame ;
Specific gravity, one point seven ;
Is dissolved in water loth
In boiling turps and ether both.

PHYSOSTIGMINE.

Dissolve ext. physostig. in water, filter (just to keep
it free.
From pysosterin), then add enough $NaHCO_3$;
Shake the mixture up with ether, separate ethereal
layer,
Evaporate, and you will find the product
ph sostigmine there.

PIL. RHEI CO.

Oh, when you have to make a mass of compound
rhubarb pill,
You take a Wedgwood mortar, and manipulate
with skill.
Of rhubarb-root in powder, as directed by B. P.,
You weigh out just three ounces, and should do it
carefully ;
Two ounces and a half to this you add of aloes Soc.,
Myrrh in powder ounce and half take from your
freshest stock,
The same of soap (though hard you use, should not
be hard as flint),
Then ninety measured minims of the oil of peppermint,
Diffuse oil through the powders, and then, but not
before,
Beat into mass with treacle, using ounces weighing
four.
P. S.—If when rolling pills, you wish them to keep
a perfect sphere,
I might suggest you did not use all the treacle
mentioned here.

POTASS FERROCYANIDE.

In making potass ferrocyanide
You parings take of horn and hoof and hide ;
Fuse them with potass. carb. in pot of iron
Until the mass is done "unto a turn."
Leave it to cool ; next in hot water solve,
And heat till yellow crystals you evolve.

Shot in the Bull's Eye.

Red Messina Orange—right in the middle of it—soda fountains are doubling their business on it.

Hance Brothers & White say : "Order a dozen or two and use a bottle—serve it right—and return the rest if it doesn't hit the bull's eye."

Orange isn't expected to be very wonderful. People that like it like it, and people that don't are apt to let it alone. If you sell Hance Brothers & White's Red Messina Orange you will find it new and out of the beaten track. It is fresh and sweet, the color is good, the strength is high, and the flavor is orange—nothing but Red Messina Orange—which is rare.

Cherry Ripe is another trade maker.

It was new last year ; it is new this year to nine out of ten. The people have no means of finding it out, and every man, woman, boy and girl will thank you for introducing it.

If Hance Brothers & White had any fear of their coming back they shouldn't risk them. There's a run on them ; hands full. But they want them sold wherever soda is served, in a way to do fine flavors justice.

They have a lot more—Pineapple, Strawberry, Raspberry, Chocolate, Unfermented Grape, Lemon, Red Currant, etc. To name them is to praise them. They haven't a mean one in the lot. They would rather say : "We don't make it," than make a mean one.

Remember, "Good soda, good drugs ;" but say nothing about it. People will find it out fast enough. That applies to Hance Brothers & White as well as to you. These fine fruit juices they make for your soda fountain are to advertise their pharmaceutical and chemical preparations.

Drop Hance Brothers & White a postal and get their liberal supply of effective advertising by return mail free. And if you haven't their "Help at Your Soda Fountains," they will send it for the asking.

Summer Vacation Tours.

The Baltimore and Ohio R. R. Co. now has on sale at all its offices east of the Ohio River a full line of tourist excursion tickets to all the lake, mountain and seashore resorts in the Eastern and Northern States and in Canada. These tickets are valid for return journey until October 31. Before deciding upon your summer outing it would be well to consult the B. & O. Book of "Routes and Rates for Summer Tours." All B. & O. ticket agents at principal points have them, and they will be sent post paid upon receipt of ten cents, by Chas. O. Scull, General Passenger Agent, B. & O. R. R., Baltimore, Md.

The Bi-palatinoid in Rome.

Messrs. Oppenheimer, Son, & Co. (Limited) have received a telegraphic message from Rome stating that they have been awarded a gold medal for their exhibit of palatinoids, bi palatinoids, and digestive ferments at the XIth International Congress of Medicine recently held in Rome. Everybody who visited the exhibition appears to have been particularly struck with Messrs. Oppenheimer's fine display there. The two handsomely decorated tables upon which the firm's goods were shown (not in commercial packages, but neatly arranged on dishes, etc.) were never without some prominent member of the Congress or the official world anxious to gather information on the composition and action of the pharmaceutical preparations displayed. The continental journals which gave notices of the exhibition all caught on to the bi-palatinoids, and even the German chemical press, which is not usually quick in acknowledging the merits of a British preparation, could not withhold its modicum of praise. Dr. Hans Heger of Vienna, the well-known authority on pharmacy and food adulteration, spontaneously selected the mode of medication represented by the bi-palatinoids as the subject of a paper read by him in the

Pharmacological Section of the Congress, in which he referred to the system of administering medicines in this form as certain of a great future, and marking an important advance in pharmacy. The exhibition jury consisted of the following university professors: Paterno, Rome (President); Daccomo, Modena; Peratona, Catania; Hans Binz, Bonn, and Professor Monardi, the president of the Government Chemical Laboratory in Rome.—*Chemist and Druggist.*

Matzoon.

Dr M. G. Dadirrian of New York city, who holds exclusive rights to the use of the word "Matzoon" as a distinctive title for the well-known preparation of fermented milk food bearing his name, has instituted proceedings in the Supreme Court of New York against certain parties who are infringing upon his trade mark. In the first of these suits, the Court has rendered a decision in his favor, and granted an injunction against Z. K. Theodorian, one of the infringing parties.

Following is the text of the decision handed down by Judge Gaynor:

The plaintiff is a native of Turkish Asia Minor, and the defendant of Constantinople, but they have been residents of this country for a number of years. In Eastern countries there is a fermented milk product in common use. It is a staple article of food, as cheese and butter are here. It is coagulated milk. It is called in Turkish a name the sound of which, rendered in English character, is, as nearly as may be, "Yogourd," and in the Armenian dialect by a name the sound of which similarly rendered is, as nearly as may be, "Matzoun" or "Matzoon," or "Madzoon." Translated meaningly into English, the article would hardly be called cheese; it would more nearly be curd; or, in its less consistent state, it resembles American bonnyclabber. There is some dispute as to whether it is made in this latter state, but it is not material. The English letters which make the sound "Matzoon" do not render the name of the article into English, or convey any understanding of what it is. It is needless to say that it is not the Armenian word at all, for the Armenian characters do not resemble the English either in appearance or sound.

In 1885 the plaintiff began to prepare and place in the market in this country a milk product for which he claims medicinal properties. He has from the beginning labelled it "Matzoon," and sold it under that name in bottles. He adopted a distinctive label, bearing the name "Matzoon," in large letters, and under it a picture of Mount Ararat and the ark and dove, and has used it ever since continuously on his preparation or product, which has become widely known under such name and label, and has grown to extensive sale as an article of commerce. I have no doubt that Turks and Armenians settled in this country made and used the article in their families before 1885, and, it may be, sold it to a limited extent; but I do not doubt upon the affidavits that the plaintiff was the first to name it "Matzoon" and to put it up and sell it under that name. It is well settled in trade mark law that any one who coins a new word and applies it to the article of manufacture has a property in it and is entitled to be protected in its exclusive use, provided it is not generic or descriptive of the article, or is not used to denote quality, ingredients, or the like, but is simply arbitrary or fanciful.—(*Brown on Trade Marks, Sec.* 219.)

The word "Matzoon" answers these requirements. It is not a real word, and it has no meaning. It is wholly fanciful. It is not a translation of any foreign word or name, as has been seen. It is nearly the sound of an Armenian word, but it is not that word, as has been seen, and it signifies nothing. If a baker were to name his bread "pang," it could not be said the word was not fanciful, but was in use, or descriptive, simply because it has the sound of the French word for bread.

There is some dispute whether the article being sold by the plaintiff is the real article as used in the Eastern countries, but that is not at all material. He has identified the word with his article, whatever it is, and the defendant has no right to use it on a similar article.

Let the injuction be made permanent against the use of the word, and also of the label as a whole.

On June 8 it was further ordered, that the above-named defendant Z. K. Theodorian, his agents and servants, be commanded to refrain from preparing, putting up, selling or offering, or advertising for sale any liquid preparation of fermented milk, or other similar article, under the name of "*Matzoon*," or any colorable imitation of said name, and from in any way imitating or infringing the plaintiff's trade mark and label for a medicinal beverage made from fermented milk, or form of bottle used in connection with said trade mark and label, during the pendency of this action and until further order of the Court.

A New Soap and Container.

The Lee's Liquid Soap Company of Chicago have rented offices in the American Druggist Building, 37 College Place, New York, and are actively introducing their liquid soap and patent reservoir. The soap has found remarkable favor in the New York hospitals, where it is used for its cleansing and detergent qualities by the surgeons. It is of about the same consistency of glycerin, and its manner of application by means of the patent reservoir is at once cleanly and economical. The reservoir, for which a patent was granted in April of this year, while ingenious in arrangement is remarkably simple in construction, and cannot possibly get out of order. In shape it resembles a small cylindrical percolator. It is provided with a stem depending from the outlet, and this on simple pressure from the palm of the hand releases a sufficient quantity of the liquid to provide an abundant lather. The New York branch of Lee's Liquid Soap Company is in charge of Chas. F. Parsons, 37 College Place, to whom all communications should be addressed.

The Soda Fountain.

Hear the fountain's merry fizz—
Soda fizz!
How it sputters, spits and gurgles when it's
getting down to biz!
With a "zwee, zwee, zwee,"
Full of rhythmic melody,
And a sort of ghoulish glee,
As it thinks—
"Anything from A to Z,
Step up quick! what sh..ll it be?
For it's all the same to me
What he drinks!"

Oh, the merry fountain's fizz—
Soda fizz!
What an effervescent robber of the pocket-
book it is!
"Orange? Lemon?—fill the cup!
Hurry! hurry!—drink me up!
Drink me rightly,
While I brightly
Fizz and sizz!"
That's the merry, merry soda fountain's fizz.

Evening Sun.

Over Half a Century.

For over half a century the John P. Lovell Arms Company has been looked to as an authority on sporting goods, and no one who ever had business dealings with this well-known firm has ever had cause to complain of unfair treatment.

After 55 successful years this house is now known throughout the country, and the very mention of the name John P. Lovell Arms Company is a synonym of honesty and reliability.

John P. Lovell, the founder of the company, although 74 years old, still retains much of his old-time vigor and keenness. He is invariably at his desk every day to overlook the rapidly increasing business of the company.

No sharp practices in trade can be laid up against him, and it is Mr. Lovell's pride that he has never given one man with whom he has transacted business any cause for complaint. His record for honesty and integrity is irreproachable.

Mr. Lovell is furthermere one of the oldest members of the order of Masons and Odd Fellows, and has been identified with other organizations and institutions.

Fortunately Mr. Lovell has some sturdy and business-like sons whom he early associated with him.

Colonel Benjamin S. Lovell, who is endowed with rare business ability, fills the position of treasurer of the company in a most thorough manner. He not only works assiduously for the interests of the company, but he has long been connected with movements for public good and organizations whose character and principles are irreproachable.

Imbued with the patriotic spirit of his sires, he enlisted in Company A, Forty-second Regiment, Massachusetts Volunteers, at the age of 17. His services for his country are only equalled by his persistent efforts in behalf of his comrades in later years.

For 15 consecutive years he was chosen commander of Reynolds' Post 58 G. A. R. He was junior vice-commander in 1880, senior vice-commander in 1881, and declined the nomination for department commander in 1882.

He was aide-de-camp to General John C. Robinson, national commander-in-chief of the G. A. R. in 1877-1878. He also served in the staff of General Russel A. Alger in 1889, and was a member of General Palmer in 1892.

During the administrations of Governor Long in 1880, 1881 and 1882, Colonel Lovell was a prominent member of His Excellency's staff.

Furthermore, Colonel Lovell has been delegate to four Republican national conventions, a member of five State legislatures, and has been prominent in Masonic and Odd Fellows' circles.

Governor Greenhalge, too, recognizing the capacity of Colonel Lovell, attached him to his staff.

Thomas P. Lovell, director, and H. L. Lovell, clerk of the corporation, have also been instrumental in bringing this company to the front.

The business of the John P. Lovell Arms Company has steadily increased until now two large buildings are necessary. The one at No. 147 Washington street is well known to all. The other at 131 Broad street is a recent addition and became indispensible, owing to the phenomenal growth of the bicycle department.

The John P. Lovell Arms Company have every facility which money, a thorough knowledge of the business and the greatest skill mechanism can produce to make the "Lovell Diamond" the best bicycle in the world.

Every year since its first appearance this bicycle has been improved, until now it is unsurpassed in point of material, workmanship, finish, safety, speed, beauty and easy running qualities.

This statement would be of little value if not backed by the guarantee of the company, and it is this which has led one well-known bicycle agent in Boston to make the offer that if you can produce in this country or any other a better bicycle than the Lovell Diamond '94 model, he will give you $1,000 in coin of any realm for each and every such wheel produced.

Not only is the use of the Lovell Diamond becoming more widespread in this country, but foreign dealers are not slow in recognizing the merit of this machine. Last week the company shipped a lot of their bicycles to one of the largest Paris houses, making a specialty of handling high-grade wheels in France. This is especially notable, as the representative of this house spent many weeks in this country selecting a bicycle for his house to carry. On his return he stated that the Lovell Diamond was superior to all English and French made wheels.

The John P. Lovell Arms Company has also closed a contract with an Englishman who desires to handle their wheels in London. He is confident that the light and durable American wheel will rapidly supplant the heavy wheels now in vogue there.

This week orders were received from India—a most extraordinary occurrence, for this field, has heretofore been occupied exclusively by English manufacturers.

The "Lovell Diamond" has the field, and it has already demonstrated that it is the king of bicycles.—*Boston Herald.*

Voices From Afar.

The *Chemist and Druggist* says the following letter was recently received by a Liverpool wholesale house from a customer in a neighboring town:—"B—, 24th February, 1893.—Gentlemen Wherefore have you not sent me the sope. His it bekawse you think my money is not so good as noboddy elses. Dam you———Co wherefor have you not sent the sope. Please send sope at once and oblige your respectful servant Richard Jones.—PS Since writing the above my wife has found the sope under the counter"

N. F. Carlsbad Salt.

The amount of trash that finds its way into the columns of the daily newspaper, in praise of the alleged medicinal qualities etc., of something which is advertised as "Genuine imported Carlsbad Sprudel Salt" is often amazing. However as the articles are usually advertisements of the plainest type, they are taken at their true value, and probably help sales. Meanwhile druggists who go by the National Formulary, experience no difficulty in preparing "Carlsbad Salt" which gives satisfaction both to the medical profession and the laity.

Under the title "Melfine" the Melfine Co. of Syracuse, N. Y., are introducing a new antiseptic liquid intended for both internal and external use. It is stated to be a peculiar combination of "ozomferous essences, antiseptic oils and gums, with the essential antiseptic principles of numerous non-toxic antiseptic agents." Melfine is a pleasant preparation of evident antiseptic value. As a mouth wash, gargle, or application in throat or nose troubles it should prove useful.

Fluctuations in Important Drugs.

We find the following statistics of fluctuations in the prices of the more important drugs during the past year in a recent issue of a contemporary trade journal. Referring to opium it is noted that this is perhaps the most disappointing article on the list. On July 1, 1893, the quotation for single cases was $2.55, with the market reported unsettled and demoralized. Values continued to decline until the latter part of August, when $2.25 was acceptable to sellers. Early in September a reaction set in, and it was rumored that a large speculative operator had entered the field with enormous financial backing, and that success was assured. Whether the statement was true or imaginary has not transpired, but values moved upward until $2.75 was recorded, when the tide again turned, and by the first of December the quotation was $2.05. A gradual recovery followed, and in January a sharp advance occurred, owing to a proposal by the Ways and Means Committee to place the article on the dutiable list at $1 per pound. Many holders advanced their views to $3.25, and general firmness prevailed with large purchases made in primary markets for American account, the imports during January, February, and March exceeding the entire receipts for the year 1893. During the latter part of February prices began to ease off and a steady gradual decline brought the selling value down to $1.95, partly due to a reconsideration of the duty question, which replaced opium on the free list, but lack of demand and absence of speculative interest had much to do with the shrinkage. About two weeks ago the trade was surprised by the receipt of cable advices from primary sources of supply to the effect that the growing crop had suffered considerable damage by drought and extreme heat, and that values were 1s. 3d. higher. Prices here immediately reacted to $2.25, but little confidence was felt in the stability of the advance, and the continued absence of important orders influenced an easier feeling, and the closing quotation for single cases is $2.10.

The fluctuations in opium influenced corresponding vacillations in morphine, but they were less frequent, and the market has not been very much disturbed during the year. On July 1, 1893, manufacturers' quotations were on the basis of $2.30 to $2.35 for eighths. No change was made until the middle of November, when a decline of 10 cents per oz. was announced. In February, while opium was practically at its highest point, manufacturers advanced their prices to $2.35 to $2.40, and subsequently in the same month to $2.45 to $2.50. The latter range prevailed until April, when values were reduced to $2.35 to $2.40. In May a further reduction was made to $2.25 to $2.30, and last month $2.15 to $2.20 was the ruling range, with the market devoid of noteworthy feature.

Quinine has improved almost steadily during the entire year, fractional advances being recorded in each successive month from July to February, and since then the declines have been slight and of no special significance. Consumption has been of average proportions, and the general conditions of the market has been considered satisfactory. While no claim is made that the manufacturers abroad have formed a combination, it is conceded that some arrangement exists whereby harmonious action is assured, and the operations of the larger consumers have been conducted with a greater degree of confidence than formerly. The ruling price for foreign in bulk, in July, 1893, was 18¼ cents, and frequent advances brought the range up to 24 to 24½ in February, but the value has since fallen off about one cent per oz., leaving the final range 23 to 23½, with a few outside speculative holdings available at 22½. The various sized packages of American which in July, 1893, were quoted 22 to 29 cents, are now held at 27½ to 34½.

Among the acids the only noteworthy changes are in citric, tartaric and salicylic. The first named has steadily declined from 44½ cents in July, 1893, to 40½ in May of this year, and the latter price is still current. Tartaric shows a loss of 2 cents per pound for the year, mainly in consequence of competition

between makers. Salicylic dropped 15 cents per lb. on June 1, and the decline was attributed to sharp competition between manufacturers who, on that date, announced their willingness to accept 97 cents for 500 lb. lots, $1 for 100 lb., and $1.02 for smaller quantities.

The oils showing improved values include anise and cassia, both of which are higher in consequence of scarcity in China, where the former has met with a heavy demand, especially from Europe. Caraway, coriander and croton have sympathized with advances in raw materials. Lemongrass is firmer, owing to scant supply of fine quality and an extraordinary consuming demand from Europe. Oil rose is about 30 per cent. higher, and the improvement is attributed to three successive short crops. Peppermint has not developed any new features worthy of special comment, and the limited fluctuations during the year were chiefly caused by supply and demand.

Among the gums the more noteworthy change has been in refined camphor, which was quoted at 50 cents in barrels on July 1, last year, and has since been steadily sagging until the present time when refiners are willing sellers at 37 cents. Asafœtida was considerably disturbed in January last, owing to the resurrection by the Appraiser's Department of an old Treasury ruling which had been obsolete for many years. It prohibited the importation of asafœtida testing under 50 per cent. of resin soluble in alcohol. Considerable consternation was created among importers and dealers, it being a well known fact that fully 75 per cent. of all importations during the previous ten years would not have passed under the decision. The result was that a great many arrivals were condemned and ordered to be returned, thereby reducing stocks materially and causing holders to advance prices about 100 per cent. on the lower grades, which had been receiving the larger share of attention from consumers. The market has settled down to a more stable basis, and while the range a year ago was 10 @ 28 cents as to quality it is now 15 @ 23.

Cod-Liver Oil has been attracting considerable attention, particularly since the result of the last season's output became known in March last. During the fiscal year, up to and including February, the better grades did not vary much from $19, but reports from primary markets that the output would be much below the average, owing to the lean conditition of the livers, resulted in a decided upward tendency in values both here and abroad. There was a steady advance here to $32 to $35 according to brand and holder, but the opportunity to realize a handsome profit occasioned rather free selling and a reaction in prices to $27 to $28 for the well known brands, and $25 to $26 for other varieties of prime. Those ranges now represent the views of sellers, and the market presents a steady appearance, with the general outlook favorable to holders during the coming consuming season.

Read the "trade notes" and the market review every issue if you want to keep posted.

Notes on Prices.

English Chemical Market.

S. W. Royse & Co., Manchester, comment as follows on the position of the general chemical market: With the exception of the tar products branch, in which we are glad to be able to note some improvement, there has latterly been little of special interest occurring in the general chemical trade; prices indeed are in general well-maintained, but the amount of business doing has been only moderate. Crude carbolic acid has been selling better and is dearer, but business is stopped for the present as buyers do not see their way to the higher prices now asked. Creosote also is firm, but benzoles are only quiet. In alkalies the prices are nominally unchanged; caustic soda has just a fair inquiry, but has perhaps a slightly easing tendency; ammonia soda is moving slowly and soda crystals and bicarbonate of soda are quiet. The demand for bleaching powder is well up to the supply, and prices are quite firm. The Board of Trade returns continue, however to be unsatisfactory; there is a further decline in the exports in May, and during the five months ended May 31 last, as compared with the corresponding period of 1893, they show in bleaching materials a decrease in weight of 7,829 tons and in value of £73-886; and in alkalies a decrease in weight of 31,683 tons, and in value of £280,438. Acetates of lime are quite firm, and are expected to be dearer as the production in America is reported to be considerably decreased. Acetates of lead are steady, but only moving slowly; acetate of soda also is still slow of sale. Nitrate of lead has at present a much better inquiry. Carbonate of ammonia is unchanged, but muriate of ammonia is more plentiful and rather easier in price. Sulphate of copper has lost ground, and has still an easing tendency. Green copperas has at present very little inquiry, but appears to have reached bottom figures. Carbonate and caustic potash have a fair demand. Yellow prussiate of potash is selling at less then syndicate quotations. Prussiate of soda has advanced strongly and is scarce on spot. Borax is still selling at low prices. Oxalic acid is firm, though quiet.

Review of the Wholesale Market.

NEW YORK, June 27, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

The volume of business in drugs, dyestuffs and chemicals, does not appreciably increase. The demand is yet of a light and unsatisfactory character, and a quiet market is expected during this and the first half of the coming month. Complaint regarding the difficulty of forwarding goods to points affected by labor troubles is becoming more general and many are free to state that business is restricted by the obstacles now existing to railroad communication. Prices continue firm upon most lines, as it is believed among holders that additional concessions would not tend to an increased distribution, buyers being apparently content to cover immediate wants only. Alcohol has advanced. Nitrate of silver has declined. Citric acid is lower. Opium is weak and prices have receded. Camphor is offered at lower prices. Quinine is offering with greater freedom.

ADVANCED.	DECLINED.
Alcohol.	Nitrate of silver.
Canary seed.	Opium.
Curacao aloes.	Camphor.
Coriander seed.	Senega root.
Acetate of lime.	

DRUGS.

ALCOHOL has been advanced by the Trust to $2.25 @ $2.28 per gallon as to quantity. This marks an increase of six cents on previous prices, and it is expected that it will have the effect of causing a corresponding advance in the price of ethers and other alcoholic preparations.

ANNATO has been inquired for to some extent of late, but the available stock is small and held at 27c.

BALSAM COPAIBA is maintained steadily at full previous prices, and a fair demand is experienced. Central American held at 33 @ 38 as to quality and quantity.

BALSAM FIR continues dull and prices are irregular. New crop Canada has sold to the extent of 20 barrels at $2.25 @ $2.40. Oregon is steady at 75 @ 80c.

BALSAM TOLU is in better supply, but the distribution is yet confined to small and unimportant lots; current sales at 25 @ 26c.

BARKS of the various kinds show no material change; the inquiry is limited at the moment to small jobbing lots.

BUCHU LEAVES, short, are in good supply, owing to recent arrivals, but prices are unchanged at the previous range; quoted 8 @ 9c. Long are dull at 24c.

CACAO BUTTER continues held at 31 @ 31½c., with jobbing parcels moving out at this figure

CHAMOMILE FLOWERS, new crop, German, upon spot, are offered at 20 c.. and forgood to prime, old, holders are now willing to accept 16 @ 18c. Roman are quiet at 15 @ 18c. for best quality.

COD LIVER OIL, Norwegian, remains quiet, but the market retains a steady appearance. From primary sources, best brands are not offered below the quotations named for some time past, holders there preferring to take the chances of the market this coming Fall. We quote the range at $25 @ $28.

ERGOT continues extremely dull, with the tone of the market easy. German (Russian) is held nominally at 21 @ 22c., and Spanish 23 @ 25c., but these figures it is said can be shaded perceptibly upon a firm bid for quantities.

GUARANA continues held at 90c. @ $1, with numerous small sales at the inside figure.

MANNA, small flake, is in fair demand and prices are steady at 31 @ 32c., which is about on a par with the cost to import.

MENTHOL does not vary from $5.50 @ $5 75, with the stock small and concentrated.

MORPHINE does not develop any new feature of importance; values are nominally unchanged at the previous range of say $1.90 @ $2.15 for bulk and $2.15 @ $2.80 for eights.

OPIUM has not maintained the recent upward movement, and the market is again weak and irregular, with prices marked down to nearly the former range. Cases are offered at $2 @ $2.05, and it is believed that less would be accepted upon a fair bid; though the opinion prevails in some quarters that a duty of $1 or $2 will yet be imposed before the new tariff measure becomes law; it may be accepted as a certainty, that the article will remain where it has been placed—upon the free list. For jobbing parcels the quotation is now $2.05 @ $2.07½; powdered is held at $2.80 @ $2 85.

QUININE appears to offer with increased freedom, though prices are maintained at the previous range. Foreign brands are quoted 22½ @ 23c. from outside hands, though we hear of some parcels of common brands offering as low as 22c.

SAFFRON, American, is weak and unsettled, with the nominal range of the market 21 @ 25c. as to quantity.

SENNA LEAVES are meeting with a good jobbing inquiry, with numerous small sales at the previous range of 18 @ 25c. for natural Alexandria, and 5 @ 15c. for Tinnivelly.

VANILLA BEANS continue in good jobbing request, and firm at $6.50 @ $13 for whole, as to quantity.

DYESTUFFS.

CUTCH is held firmly in view of the limited stock at present available. Prime quality stock quoted 5⅝ @ 6c., block 6 @ 6¼c.; ordinary slab 6½ @ 7c., and MM do. 8½ @ 9c.

GAMBIER continues dull, but holders manifest no disposition to urge sales at a concession. Steamer lots ex-store are held at 3⅞c., and sail 4 @ 4½c. as to quantity.

NUTGALLS, Blue Aleppo, remain quiet; jobbing sales are making at 13 @ 13½c.

SUMAC, Sicily, remains at $67.50 @ $70.

CHEMICALS.

ARSENIC, white, continues in moderate inquiry, though the larger consumers are said to have covered their requirements for the time. Importers quote at 3½ @ 3¾c. as to brand and quantity.

BLEACHING POWDER is in moderate request at the range of $2 @ $2.25 as to make, quantity and package.

ACETATE OF LIME continues scarce, and supplies are offered sparingly. Brown held at 95c. and $1, and grey at $1.65 @ $1.70.

BORAX is maintained at about previous values, though lower prices are promised under the new tariff. Refined offers at 8¼ @ 8½c., and concentrated 7½ @ 7¾c.

CALOMEL, Howard's English, has again been reduced, the New York agent being prepared to accept orders at 75c.

CARBOLIC ACID is meeting with better inquiry, and we are reported numerous small sales of English in drums at 12½c. and bottles 20½c.

CHLORATE OF POTASH continues inactive and the market is dull. German crystals quoted at 13¼c. and English 13½c.

CREAM TARTAR, powdered, continues to offer at 17¼ @ 17½c., but the demand is yet limited to small and unimportant jobbing lots.

CITRIC ACID has been reduced by domestic makers to 40c. in bbls., and 40½c. in kegs, the decline in value being created by a corresponding reduction in foreign markets.

NITRATE OF SILVER has declined 1½c. per ounce, the quotation now standing at 41½ @ 43c. as to quantity, the inside price for lots of 1,000 ounces. At the close the market was steady at the decline.

OXALIC ACID appears to be improving in position, though 6⅜c. is yet named in exceptional instances. Most holders quote 6½ @ 6⅝c.

QUICKSILVER continues to sell fairly in a jobbing way at the range of 59½ @ 60c.

ESSENTIAL OILS

ANISE is held at full previous prices, though there is no special inquiry for quanties in excess of jobbing orders. We quote the range at $1.50 @ $1.55.

BERGAMOT remains at $1.75 @ $2, with trade, however, of a very moderate character.

CASSIA continues to offer at 82½ @ 85c., with, however, only a limited distribution at this range.

CLOVE remains at 50 @ 52½c., but there is no action of any consequence noticed in the market.

LEMON AND ORANGE are meeting with about the usual amount of attention, with sales making at 80c. @ $1.35 for the former, and $1.35 @ $1.40 for the latter.

PEPPERMINT, HGH, is in good position. Advices from London report large sales in that market at 12s. 7½d. We quote the range steady at $2.30 @ $2.60 for bulk, and $2.90 @ $3 for HGH.

GUMS.

ALOES, Curacao, are actively inquired for, and among other transactions we are reported sales of 3,000 lbs., cullings at 3c., the same being good ordinary quality in boxes. We quote the range at 3¼ @ 3½c.

ARABIC appears to be moving into stronger position at primary sources, and values here are improving in consequence.

CAMPHOR, domestic has declined owing to competition with the foreign article; barrels and cases are now quoted 36 @ 37c. Japanese is offered at 36c.

ASAFŒTIDA continues held at 15 @ 25c.; of Calcutta we are reported sales of 17 cases at 22 @ 24c.

CHICLE is in better supply, though prices are yet maintained upon the old level of 25 @ 26c.

KINO of the better grades are extremely scarce and held at full $1.40.

SHELLAC continues dull and inactive; prices are without quotable change.

TRAGACANTH is firmer, and recent advices from London seem to indicate a rising market.

ROOTS.

ACONITE, ALKANET, and ALTHEA are without special change; small sales at quotation.

GINGER, Jamaica unbleached, is strengthening and an early appreciation is looked for. Inferior grades are now held at 12½c. as an inside price, and up to 14c. is asked for best qualities. Bleached quoted 15 @ 17c.

IPECAC remains quiet at the previous range of $1.05 @ $1.15 as to quality.

JALAP continues slow of sale though thers is no pressure making upon the part of either importers or jobbers to urge the distribution. We quote prime grades at 15 @ 20c.

SARSAPARILLA, Mexican, is in limited supply and under close control of jobbers. For limited quantities 9½c. is asked.

SENEGA continues to offer upon the spot at 37c. and to arrive at 33c.

SEEDS.

ANISE does not vary either in price or demand. We quote the range at 8½ @ 10c. for Italian.

CANARY is maintained in strong position, cable reports indicating a strong and rising market for Smyrna. The stock here is under pretty good control and held at 2⅞c.; Sicily is firm at 3⅛c. @ 3¾c.

CELERY is meeting with more inquiry, and we are reported sales of 12 bags at 12c., but quotations now are comparatively steady at 13 @ 13½c.

CORIANDER is scarce and firm at 9c. and higher prices are looked for before the receipt of new crop.

Hemp, Russian, is offered in instances at 3⅜c., but an appreciation in values is expected soon.

MUSTARD and other staples are without important change.

Wholesale Druggists' Prices.

We note below the important changes which have taken place during the past fortnight in the prices at which retailers purchase goods in ordinary lots.

ALCOHOL has advanced 6 cents per gallon.

BORACIC ACID, powdered, has declined from 24 @ 27c. to 20 @ 25c.

CITRIC ACID, crystal, has declined 42 @ 47c.; the former price was 43 @ 50c.

ALOIN has declined from 18 @ 22c. to 14 @ 16c.

AMMONIUM, Bromide, has advanced from 55 @ 58c. to 60 @ 65c.

ST. IGNATIUS Beans have advanced from 35 @ 40c. to 65 @ 75c.

BISMUTH, Subcarbonate, has declined from $2.60 @ $2.75 to $1.75 @ $2; and subnitrate from $2.15 @ $2.25 to $1.65 @ $1.75.

CAMPHOR has declined from 42 @ 48c. to 37 @ 45c.

CREOSOTE, Beachwood tar, is now quoted $1.40 @ $2.50; the former quotation was $1.40 @ $1.50.

ETHER, Acetic, has declined from 68 @ 75c. to 55 @ 60c.

GELATIN, Cooper's, has declined to 40 @47c.; the former quotation was 70 @ 75c.

OPIUM is now quoted $2.20 @ $2.40, the previous quotation being $2.25, and powdered formerly quoted $3.25 has declined to $3 to $3.25.

ICHTHYOL is quoted $5.75 @ $6, previously at $6.

MORPHINE, Acetate, now quoted $2.20 @ $2.30; Muriate, $5.20 @ $2.30, and sulphate $2.20 @ $2.35; the former range was $2.35 @ $2.50.

Montserrat Lime Juice.

The articles which have appeared in our columns recently on lime juice and the West India lime have served to direct considerable attention to the juice and its medicinal properties, and we learn from dealers that an increased demand has sprung up for this grateful and wholesome beverage. When we speak of lime juice we refer of course to the pure lime fruit juice of the Montserrat Company, which is the product upon which the great reputation of lime juice as a beverage and a medicinal agent has been built. The sale of the Montserrat lime fruit juice is being actively pushed in the United States by the Montserrat Company, and branch offices have been opened in Boston and New York, from which the goods are being shipped to all parts.

Pharmacists who desire to make an attractive display either on their soda counter or show cases will find it decidedly to their benefit to write to the Montserrat Company for a supply of show cards and descriptive pamphlets. Supplies of the lime juice can be obtained through any wholesale druggist, or direct from the New York agents, John M. Chapman & Co., 105 Hudson street, New York.

Seabury & Johnson, 59–61 Maiden Lane, this city, are placing on the market a new carbolated soap containing 5 per cent. of acid. The soap is put up in S. & J's. new air-tight container, and should command a wide sale. The package is extremely attractive and neat, and will commend itself particularly to travellers, as it does away with the necessity of providing a special soap container. Druggists who are careful to stock first-class novelties should immediately procure a trial lot.